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BRIEF PRESENTED TO

THE ROYAL COMMISSION ON NORTHERN ENVIRONMENT

JANUARY 27, 1983

ARMSTRONG LIONS CLUB

ARMSTRONG, ONTARIO

BY

ARMSTRONG METIS ASSOCIATION





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## THE ANISHNABEG POINT OF VIEW

The purpose of this report is to create an awareness in the Ontario Royal Commission on the Northern Environment, of the problems, and hindrances to social and economic development of the communities of Armstrong, Mud River, Ferland, and Auden. It is written from the point of view of the original inhabitants of this land, or as we call ourselves, the Anishnabeg.

We have chosen the Ojibway word Anishnabeg, since we feel the words Indian, Native, and Metis, are misleading and have their roots in European misconception. To be Anishnabeg is to be in possession of a unique and harmonious philosophy of land use and way of being. Our people have lived in peace with the land since before remembrance, our's is a rich and creative culture.

When the whiteman came to our land they tried to shape it into patterns of use, which we feel have been destructive for the land, and its inhabitants. We realize we cannot turn back the flow of time, however, we can influence and modify future patterns of use.

By the end of the 19th century much of the wildlife was gone from our lands. Although this over exploitation of wildlife has now been turned around through conservation efforts, there is a continued abuse of the forest, and fisheries resource. Of course, all of these things, the forest, the waterways, and the wildlife are inter-connected. You cannot change one without affecting the others.

Much of the forests in southern and central Ontario have been devastated, and now the "industry" is moving our way. As always southern white society has come to regard the land, which the Anishnabeg occupy, as their own personal storehouse of natural resources to be abused as they please for short term gain.

Our occupation and use of the land has traditionally been ignored by the major developments, this situation must change.

We feel the recommendations made in this report will do much to improve the future of not only the Anishnabeg, but also white society. Our's is the original



"conservator society", if major developments north of the 50th parallel take into account our philosophy of land use, its resources will indeed be renewable.

Much of the information which we are presenting here cannot be proved with pieces of paper, it comes from our heads, our remembrances. We have had difficulty in getting co-operation from various government agencies, particularly the Ontario Ministry of Natural Resources, in our research and many of the incidents we will relate have not been recorded on paper. Nonetheless, the incidents did occur.

We would like to thank the commission for the opportunity to present our point of view, we hope it will be of assistance in changing the way of things in the future.



## THE COMMUNITIES

### ARMSTRONG:

- population 500, this figure is increased by a population of transient forestry workers, approximately 60% of Armstrong's population is Anishnabeg.
- housing and sewage facilities for most of the Anishnabeg are deplorable, outdoor privies, and communal wells
- there is one school with classes to grade eight
- four drinking establishments and one provincial liquor outlet
- few job opportunities for the Anishnabeg, most available are with CNR
- road access to Thunder Bay

### MUD RIVER:

- population 30 almost entirely Anishnabeg
- housing and sewage facilities deplorable, water is hauled from the river
- access by rail or air transport only
- few jobs available - most families exist on welfare
- children from Mud River must be boarded out in Armstrong when they go to school

### FERLAND:

- population 110 at last count. This figure is probably high since some people have moved to Armstrong.
- school children must be boarded out in Armstrong
- housing, and sewage facilities deplorable, water is hauled from a forest stream some distance from the community
- few jobs available - most families exist on welfare

### AUDEN:

- population 135, this figure is probably high since many families have moved to larger centers
- housing for Anishnabeg residents generally poor, local water source is sulphurous
- one room school to grade eight
- road access to Highway 11
- Major employers have been CNR, and Abitibi Price Ltd., however because of CNR's new mobile section policy, married workers are being discouraged, and Abitibi Price has definitely closed Camp 40.

## CHAPTER ONE

### THE ONTARIO MINISTRY OF NATURAL RESOURCES

The cultural and economic lives of the Anishnabeg of Armstrong and the rail communities are intimately tied to the forest, wildlife and waters of the land. Because of this, the government agency that has the greatest influence on us is the Ontario Ministry of Natural Resources, (MNR). The MNR is responsible for the regulation of forestry, trapping, fishing, and hunting. All of these activities are in some way crucial to the Anishnabeg's way of life.

As it stands now, this agency acts with total disregard for the Anishnabeg and their uses of the land. Perhaps no other agency of government has been so insensitive and ignorant of the Anishnabeg's natural, and legal rights to the use of the land.

The MNR's priorities would seem to start first with accommodating the large resource extracting corporations, such as Great West Timber Ltd., secondly with providing business opportunities for the larger non-Anishnabeg tourist outfitters, and lastly with keeping the Anishnabeg hunters, trappers, and fishermen, out of the first two's way.

Strong words? . . . . Perhaps, but this is what we the Anishnabeg have seen taking place in Ontario since confederation. The Department of Lands and Forest and more lately the MNR have been the major tool with which white society has robbed us of our heritage.



## LAND AVAILABILITY

### Problems

- almost all of the land is owned by the crown and administered by the MNR
- this effectively eliminates the Anishnabeg from having any say in how the land is used
- the extractive industries' needs take precedence over the Anishnabegs'
- getting and keeping landuse permits is not easy for the average Anishnabe, at present the permits must be renewed every year
- this situation gives a built in uncertainty to any business venture an Anishnabe might enter into, since he has no assurance his permit will not be cancelled
- many older land use permits held by non-Anishnabeg tourist operators are for 99 years
- organizations such as the Northern Ontario Tourist Outfitters can put pressure on the MNR to remove individual Anishnabeg hunters, trappers, and fishermen from the areas they wish to use

### Solutions

- allow the sale of crownland at reduced rates to the Anishnabeg especially around their home communities
- assist or at least encourage the development of Anishnabeg resource extraction companies and give them priority of outside companies
- negotiate a system of landuse for the Anishnabeg which is similar to their traditional landuse patterns
- include Anishnabeg groups in any landuse planning discussions
- give Anishnabeg landuse priority over outside enterprises ie. foster and encourage Anishnabeg tourist outfitting companies

### Comments

At present the Anishnabeg have no say over how their land is being used. We are the last people to be considered when landuse planning is done. Generally, any consultation with us is done after all of the decisions have already been made. Any consideration of our needs is done with a profound misunderstanding of who we are, and how we want to live our lives.

The government has come to regard us as a people without power, a people to be forgotten, a people who, if they do not look at us for long enough, will disappear. We will not disappear, despite government's wish that we do so.

The way the system works now is that major development takes place on our lands leaving us with no money and a land that has been laid to waste. The logging

industry is a classic example. The forests to the south of here have been consumed, and now the beast with the endless appetite for trees turns our way. Soon we will be left with a vast prairie of stumps and slash.

Little do non-Anishnabeg Canadians realize that these logging interests, that they support, are robbing them as well as us, or to put it another way the logging companies are killing the goose that laid the golden egg.

### FORESTRY

#### Problems

- to date there has been no Anishnabeg participation in the forestry industry in Armstrong
- massive over-exploitation of the forest resource
- inadequate and inefficient reforestation practices, which to date have largely been paid for by the Canadian public and not the timber companies
- little regard for the effect forestry has on wildlife habitat
- the spraying of 2-4-D on reforested areas to kill broadleaf species, such as aspen, aspen is the principle food stuff of beaver, ruffed grouse and moose
- the practice of monoculture and its problems of massive disease and pest outbreaks which will be dealt with by more spraying

#### Solutions

- the formation of small native logging companies
- provision of venture capital for such companies
- a slower more conservation minded approach to the forest resource
- native logging companies acting as reforesters as well as loggers
- the exploration of the forestry techniques used in countries such as Sweden and Norway, and application of these techniques in Northern Ontario

#### Comments

The current situation with forestry in the Armstrong area is a blatant example of how little consideration the MNR has given to the Anishnabeg.

Originally, certain cutting areas around Armstrong were designated as Crown Management Units, (CMU), this was to provide for the hiring of local people in the forest industry. Although the designation local is vague, it can be assumed that it was implemented to in some measure employ Anishnabeg. This, however, has not been the result.



The CMU was let out to Great West Timber Ltd. and its subcontractor Nym Lake Timber, and Jo Jo Lake Logging. At present there are no Anishnabeg working for either of these companies. Neither are any local non-Anishnabeg working for them. Why?

It would seem the current demands of these companies on employees is that they work up to 16 hours a day. Since very few Anishnabeg or local non-Anishnabeg see the value in working that long everyday, they declined the jobs.

As a result of this we have again been labeled as lazy and unreliable workers - just the Anishnabeg, mind you, those local whites who refuse to work these long hours somehow never get mentioned.

Nym Lake Timber now gets the majority of its workers from either Quebec or the Maritimes and has gone as far as to advertise for workers in those areas.

In one reported incident two young Anishnabeg cutters went to work for Nym Lake. Neither of these men were drinkers. They found they were continually being given the worst areas to cut, and the Quebecois, and Maritimers were given the choice areas. Eventually they realized they couldn't make any money under those circumstances and quit. There you are, Nym Lake gave them a chance and they blew it. Indians are unreliable, lazy and drunkards.

Another sore point for the Anishnabeg has been a recent development in cone picking. Since Nym Lake Timber has started hiring outside workers they have allowed these worker's families to pick cones on the skidways as soon as the trees have been dragged there. This to our way of thinking is an unsafe practice. It is also unfair to the Anishnabeg cone pickers, who are only allowed on the skidways 48 hours after the cutting has been done. By this time the cutters families have stripped the trees.

What we would like to know about the whole CMU issue is why encouragement and financial support for Anishnabeg subcontractors was not given? To have done this would have resulted in the CMU truly fulfilling the purpose of providing employment.

## COMMERCIAL FISHING

### Problems

- over-fishing owing to technological advancements ie. cotton nets, replaced by nylon nets and these are being replaced by monofilament nets;
- as a result of the use of these gill nets many fish are needlessly killed and wasted
- over-fishing is also a result of inadequate biological research being done on Lake Nipigon and area
- unfair allotment of fishing quota to the small scale Anishnabeg fishermen
- under-usage of "coarse fish" species for such things as fertilizer and animal feed concentrate
- over-fishing of allowable sports limits by tourist fishermen
- too few conservation officers patrolling Lake Nipigon to enforce limits and quotas
- baitfishing quotas not being fairly allotted to Anishnabeg
- deterioration of water-quality in the lake as a result of logging, hydro-electric projects, and acid rain

### Solutions

- change from the use of gill nets to impoundment type nets so those species not desired can be removed and set free
- the collection and analysis of more local biological data to assess fish populations and setting limits and quotas
- a reassessment of the entire licensing system and fairer allocation to the Anishnabeg fishermen
- establishment of a coarse fish industry in the community of Ferland or Mud River, this industry could be tied in with a fur farming operation
- hire and train Anishnabeg as conservation officers and officer's assistants to increase the number of patrols on the lake.
- reassessment of baitfish licensing
- the provision of funds from water rental fees, which Ontario Hydro pays to the provincial government, should be put directly into fisheries improvement and rehabilitation

### Comments

In commercial fishing just as in forestry, there is a great gap between how the Anishnabeg and the government view the resources available.

We have fished on Lake Nipigon for countless generations, and the fishing was never wanting. Now in the matter of a few generations the fishing is beginning to decline. This decline has accelerated over the last twenty years.

We recognize this decline is primarily attributable to the over-fishing of the lake by non-Anishnabeg fishing operations. Secondly, many of the prime spawning beds have been destroyed either by the Ogoki Diversion and consequent siltation of



# WILL ALWAYS BE REMEMBERED BY M.N.R. AND LARGE TIMBER COMPANIES AND CORPORATIONS

ARMSTRONG METIS ASSOCIATION  
BOX 84  
ARMSTRONG, ONT.



Ombabika Bay, or the effects of logging debris in rivers. Now there is the added problem of acid rain.

Although the secondary causes of the declining Lake Nipigon fishery are complex and difficult to solve, the primary cause, that of over-fishing, could be easily remedied by the provision of better fisheries research and reassessment of catch limits.

Because of the way the Anishnabeg view the fishing resource, we feel our small scale fishing operations are better suited to exploit the fishing resource on a long term basis. The way the Anishnabeg go about fishing is, that it is only part of the way he takes his living from the land.

Perhaps the best example of how insensitive and ignorant the MNR has been of Anishnabeg use of the fishery is the case of Mr. <sup>WILLIAM</sup> ~~Even~~ Messon. Mr. Messon received in the mail one day a letter from the MNR telling him he was only allowed to take whitefish in his gill nets. How was he to explain to the pike, pickerel, and lake trout that the MNR no longer allowed them to swim into his nets? It was a means of removing one more Anishnabeg fisherman from the lake.



## TRAPPING

### Problems

- at present the fur resource in Armstrong and the rail communities is being under-exploited
- the reasons for this are: that there are no longer any fur buyers in Armstrong to provide a quick sale and assure money for further trapping expenditures, and all easily accessible traplines are being used, those unaccessible traplines are much more expensive to operate because of transportation costs
- limits of one cabin per trapline hinder full utilization of the trapline area

### Solutions

- restructure trapline boundaries and perhaps break some of the larger lines into smaller units
- explore the possibilities of starting a fur buying co-operative to assure the trappers at least half the fur price in advance
- provide a reduction in the fur royalty taken from trappers who operate on remote lines
- allow more cabins on those larger more remote lines
- provide trappers with tax advice so they can fully benefit from tax write-offs

### Comments

We feel a more integrated approach to the use of land north of the 50th parallel should be put into practice. This would see the restructuring of the old trapline system into Anishnabeg landuse units, which would be based on traditional Anishnabeg hunting patterns. These areas would be used not only for trapping but also for hunting, baitfishing, and limited logging.

Although this concept is radically different from the current practices of the MNR, we feel it would be more suitable to the Anishnabeg way of life. We would like the opportunity to negotiate such a system of landuse with the MNR.

WHITEWATER PARKProblems

- Anishnabeg are the last people to be consulted or considered in the park planning process
- there is the possibility of the Anishnabeg being prohibited from pursuing their traditional hunting and trapping activities in a "wilderness park"
- outside non-Anishnabeg wilderness outfitters will derive most of the economic benefit from the park

Solutions

- Anishnabeg groups be given full standing in any meaningful discussions on the proposed park
- regardless of whether the park becomes "multi-use" or "wilderness" Anishnabeg traditional uses of the area must be assured
- in any park, Anishnabeg should be hired and trained as park rangers, outfitters, and guides

Comments

The idea of a whitewater park could mean a substantial increase in employment for the Anishnabeg people of Armstrong and the rail communities. If however, it is handled in the usual MNR manner it will mean nothing for the Anishnabeg.

At present both the multi-use and wilderness factions in the park debate are using the Anishnabeg as pawns in trying to establish how the park should be planned.

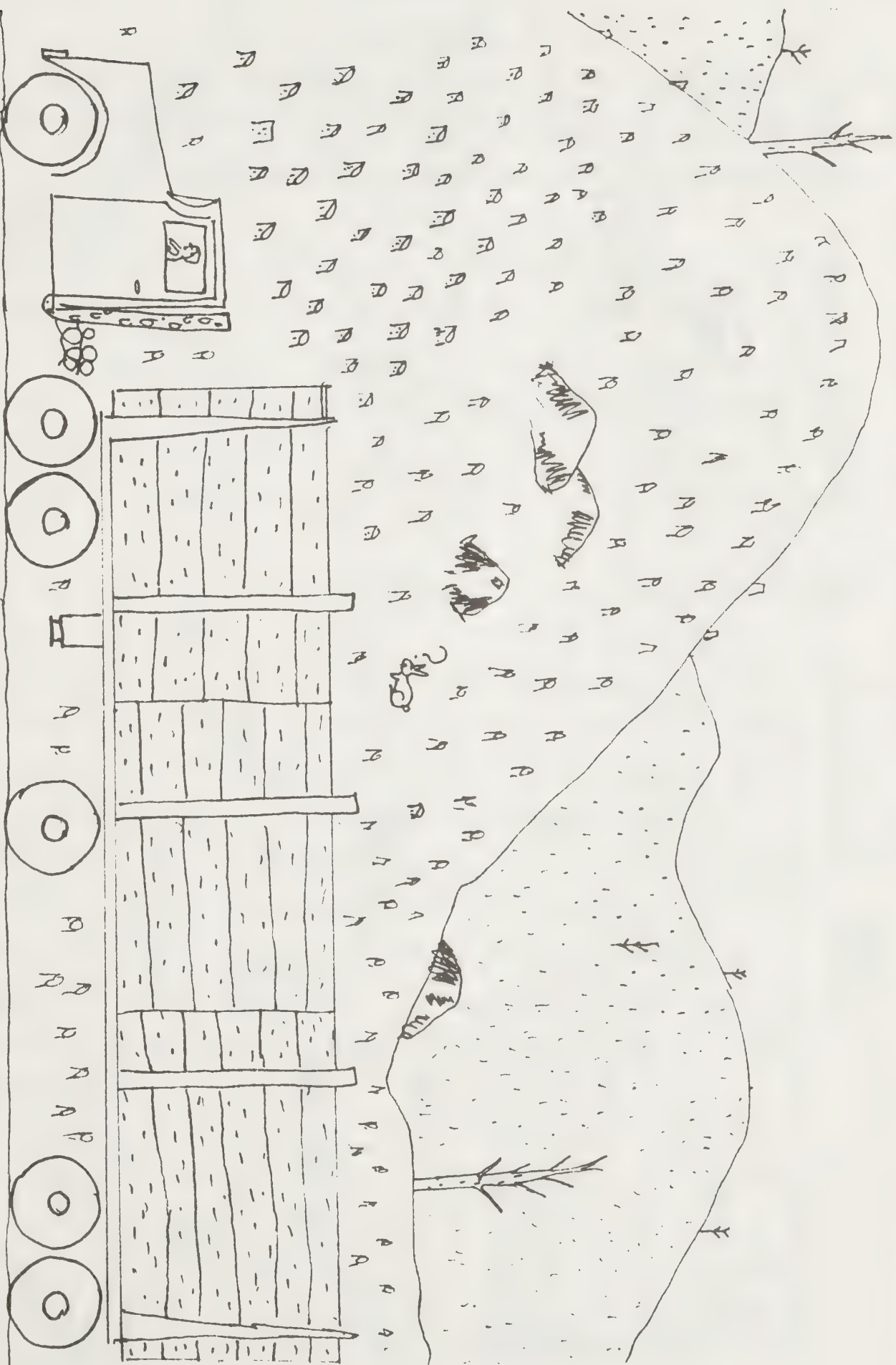
The multi-use group say it will provide jobs for the Anishnabeg, when such things as logging, and fly-in camps are established. The wilderness groups say it will provide an area for us to pursue our traditional activities. We wonder how soon these things will be forgotten when the final decisions about the park are made.

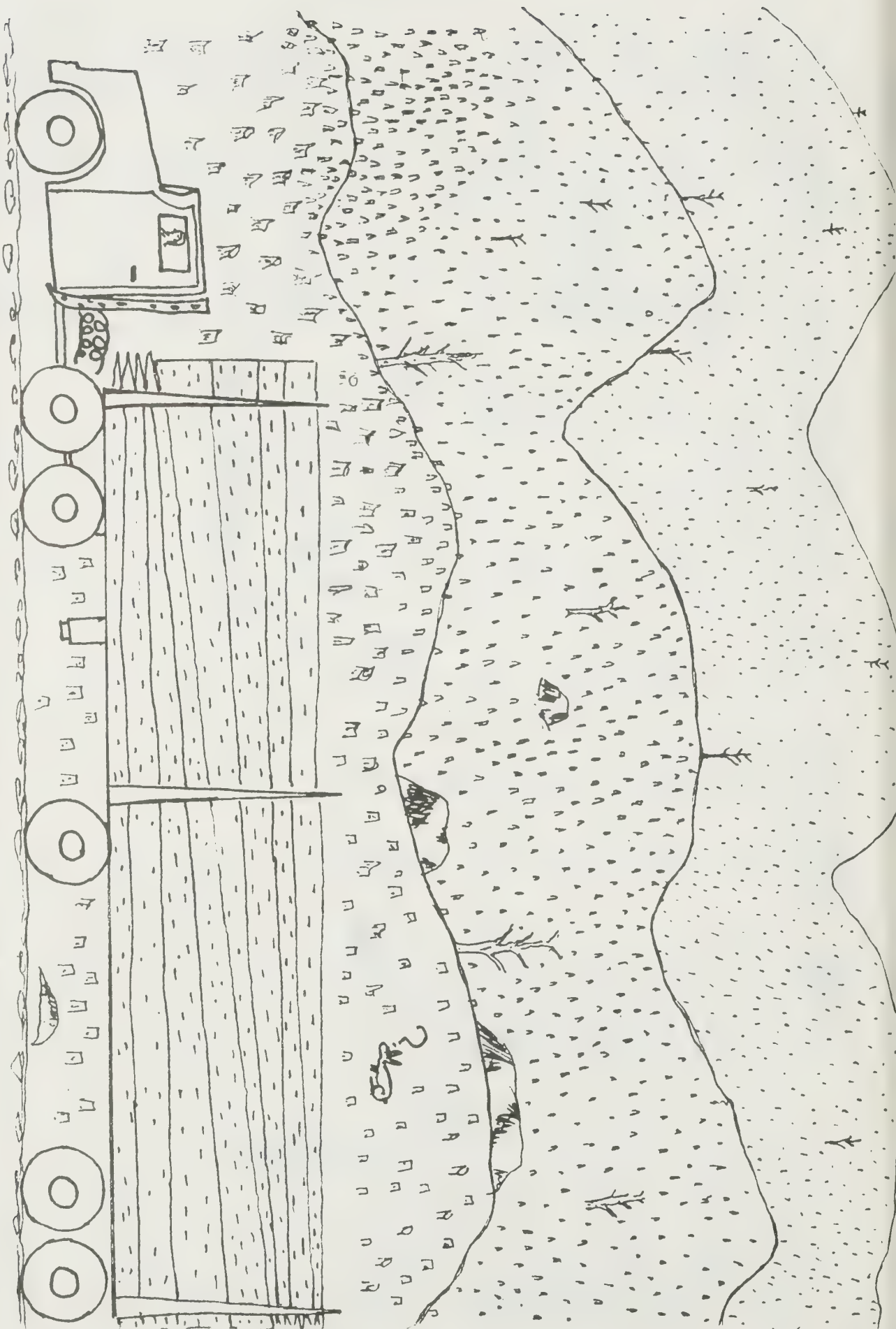
From our past experience we feel the ultimate winner in the whitewater park debate will be the forestry industry.

If the park is ultimately granted a "wilderness" designation the Anishnabeg could become an integral part of the park, pursuing their traditional activities and giving a living example of how man may live in harmony with the land.



FROM ARMSTRONG TO THUNDER BAY.





FROM ARMSTRONG TO THUNDER BAY  
“WHY NOT FINISH THE PRODUCTS HERE?”



## CHAPTER TWO

### TRANSPORTATION

Because they are so isolated the rail communities of Mud River, Ferland, and Auden have a major problem in obtaining goods and services. Transportation above all else will be the factor that determines whether the rail communities survive or become ghost towns.

We believe there is a slow and deliberate effort being made by the provincial and federal governments to destroy these communities and cause their residents to be moved to the larger centers of Geraldton and Armstrong.

This is a classic bureaucratic move, which comes from the philosophy that if we are all herded into one place we will be easier to "administer". It also shows just how little regard the government has for us and our right to choose our own way of life.

We feel this right of choice is central to the entire issue of development in the north.

Often when we ask for services, the government offers it to us on the condition that we conform to the whiteman's way of life. The ultimate aim of government seems to be to turn us into respectable whitemen. Look at your savage, barbarous, poverty stricken, past, they say, do you want to return to that?

Our reply to this is, that our past is no more barbarous than your's was, in fact we feel it was a good deal less so. That bias aside, however, why should we be expected to accept either end of the stick, - be a whiteman or go back to living in a wigwam? We are the ones who will finally decide the direction our culture is to take, not government. It is a foolish assumption on government's part that they can choose for us.

THE CANADIAN NATIONAL RAILWAY  
AND VIA RAIL PASSENGER SERVICE

Problems

- infrequent passenger service to the rail communities; a shopping trip to Armstrong takes two days
- our children from Mud River, and Ferland must be boarded in Armstrong when they go to school
- certain products such as gasoline, coal oil, napthalene, and ammunition are not allowed to be carried on passenger trains
- freight trains now refuse to stop for small orders of goods in places like Ferland and Mud River
- even if you could get a 45 gallon barrel of fuel oil into Mud River, the total cost including freight rates would be \$280.
- this overall lack of service results in little opportunity for the development of a healthy community
- there are no waiting rooms or shelters provided in the rail communities

Solutions

- have a small gas-powered shuttle vehicle to service the rail communities on a daily basis
- this vehicle would serve as a school bus, ambulance, and freight hauler
- the shuttle could be operated by retired CNR section men who are familiar with the signal system
- funding for such a service could come partially from the provincial government just as the funding for Ontario Northlands and GO Transit is provided
- waiting shelters for passengers should be built in the rail communities

Comments

To put into effect such a transportation service as discussed above would immeasurably improve the living conditions in the rail communities. The cost of this service would be minimal, since it would require only a gas powered road vehicle converted to rail use. The CNR road masters now drive similar vehicles.



## CNR'S HIRING POLICY

### Problems

- CNR's latest hiring policy (mobile section gangs) has been to discourage married workers
- the setting up of very elaborate work camps away from established communities
- married workers who are currently living in CNR housing are being encouraged to leave the housing and move their families into local houses then commute to the camps
- this policy will ultimately result in work loss for the Anishnabeg, who will be unwilling to leave their families for extended periods of time
- hiring now is done out of Toronto, not locally

### Solutions

- continue with old hiring policy of having primarily Anishnabeg section gangs
- set up recreation facilities in established communities such as Armstrong
- continue to provide housing for Anishnabeg workers and their families in the established communities
- continue with the local hiring of section gangs

### Comments

At one time the CNR was a good employer for the Anishnabeg residents of the rail communities and Armstrong. This was in the days when there were no modern conveniences for the section gangs, and they lived in unlit shacks, heated by wood stoves. The Anishnabeg section gangs were respected for the good job they did under hard conditions.

Now it seems that just when the CNR is improving their workers conditions they are phasing out the Anishnabeg workers. We do not believe that this has been CNR's intent, but this will be the result of the new mobile section policy.

Right now, about eight miles from Armstrong at the site of the abandoned community of Wagaming, CNR has constructed a camp for 50 single workers. The camp has a 24 channel satellite dish, a cookery, and recreational facilities for workers. Workers are expected to work for eight days and then get four days off. A similar station is located in Auden complete with a slate-topped billiard table. In Auden CNR workers, who are married, are being asked to leave.

The satellite dish here is only 200 feet from the public school, but no effort was made to connect the school, which must use a video taping machine to get programming for classes.

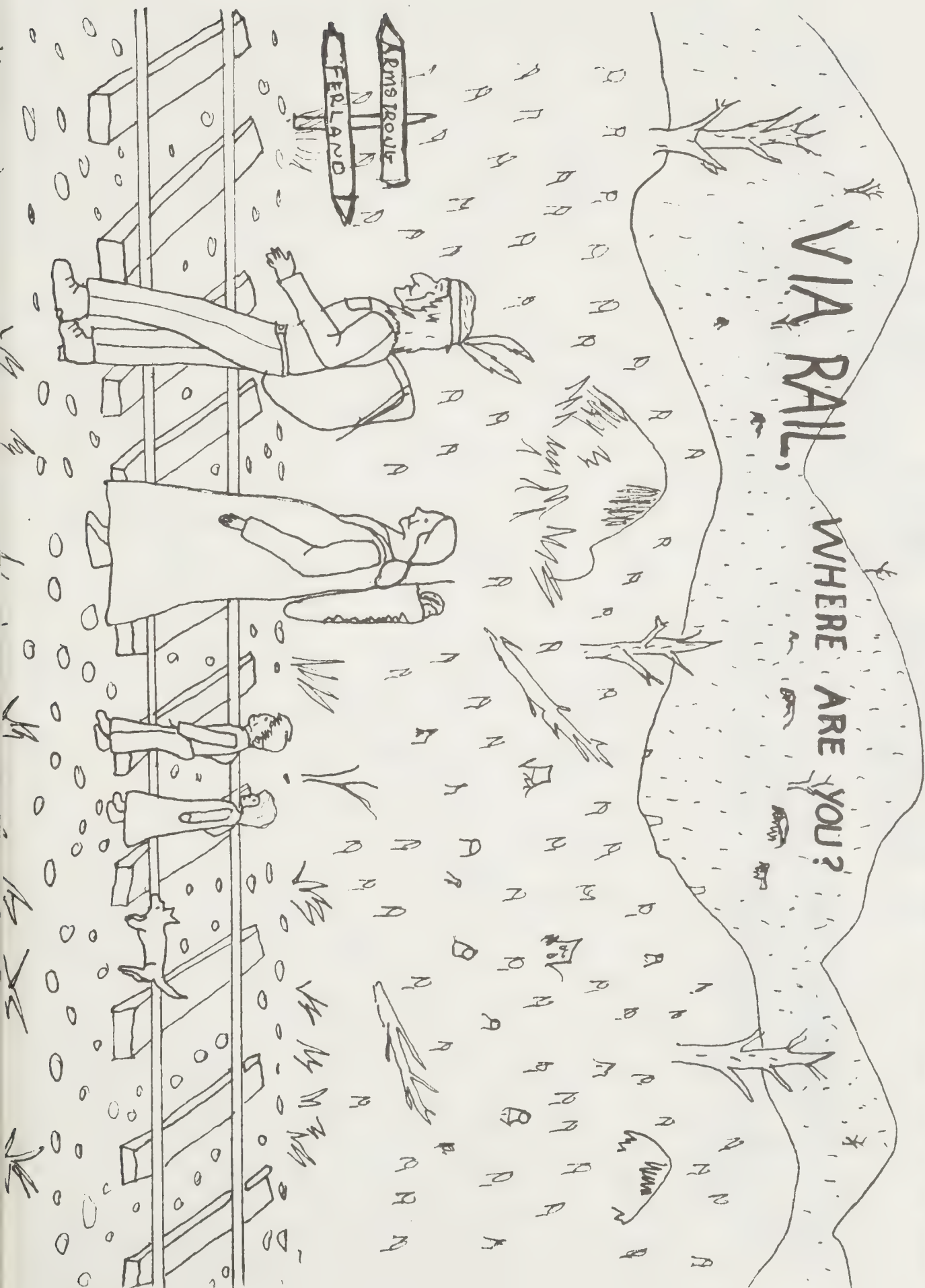
Why weren't these new facilities at Wagaming put into Armstrong, and why can't the community of Auden use CNR's facilities?

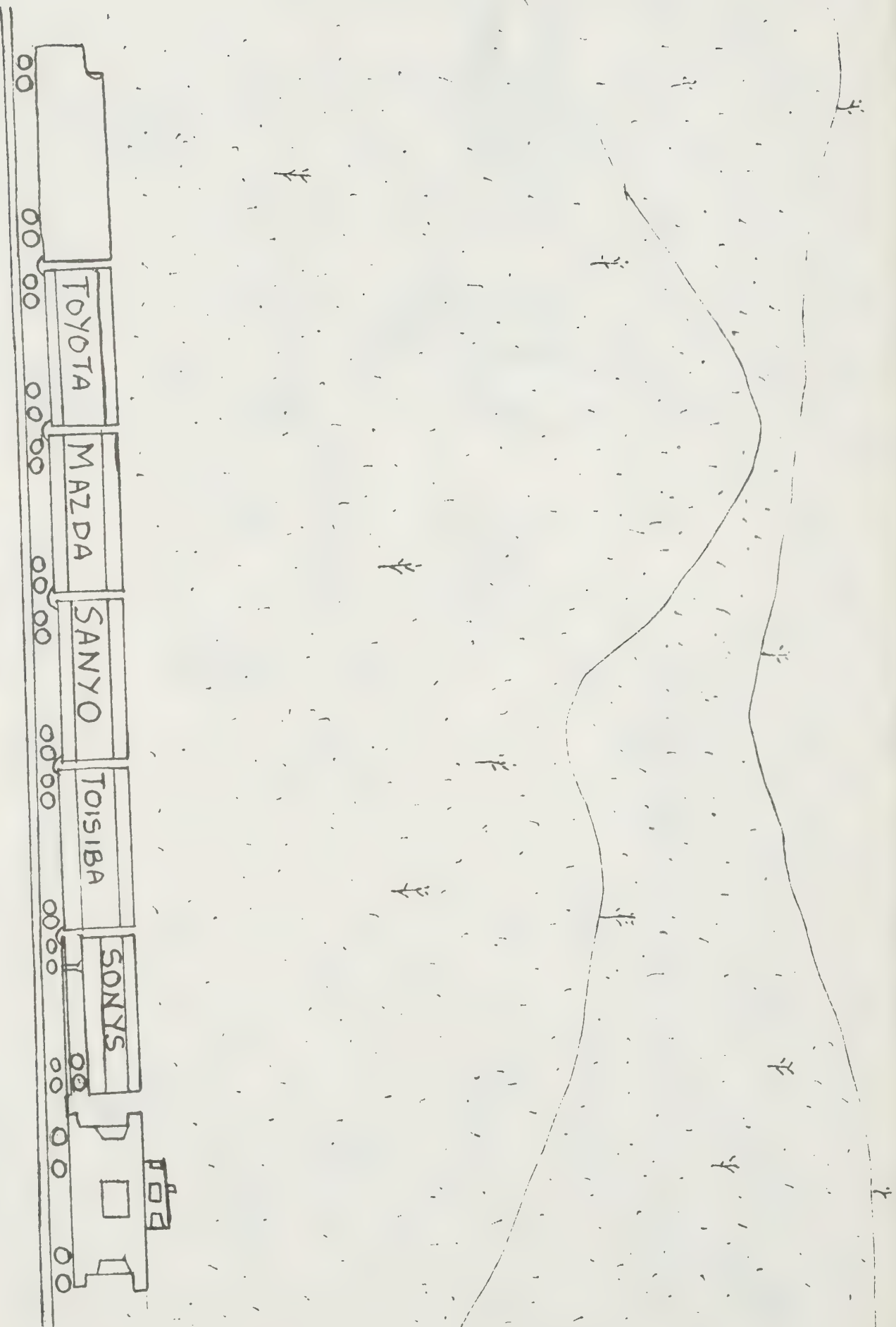
Because the Anishnabeg have a very real sense of family, and do not wish to leave our homes for eight days in a row, the CNR have effectively eliminated us from jobs at which we excelled.

We feel the CNR is making a mistake for the sake of "streamlining" their operation. The Anishnabeg have always been good steady workers and we wonder what the turnover rate of single young men in these camps will be?



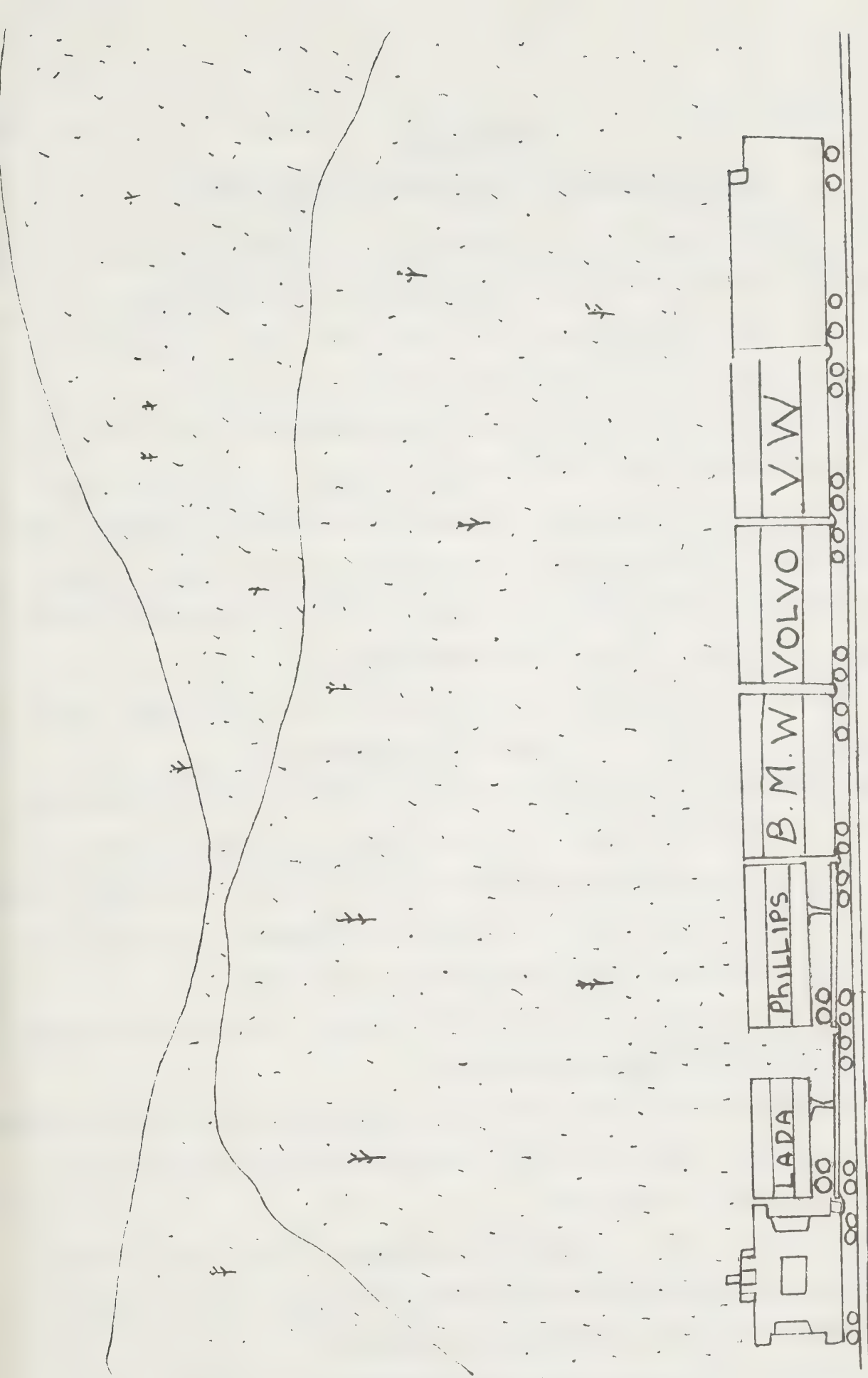
# VIA RAIL, WHERE ARE YOU?





# CN's TOP PRIORITIES





*CN'S TOP PRIORITIES*

### CHAPTER THREE

#### ONTARIO HYDRO AND THE LITTLE JACKFISH RIVER PROPOSAL

Ontario Hydro's proposed Little Jackfish River development is the most serious major project facing the Anishnabeg of Armstrong and the rail communities. If approved it will see the construction of two hydroelectric dams on the Little Jackfish River about 7.9 and 12.5 miles from the mouth of the river.

When completed the project will result in the flooding of a large area of land in the Mojikit Lake area. It will displace a number of Anishnabeg trappers, and hunters, in Ferland and Mud River. Not only will these people lose their land base to the dams, but they will receive no electricity or road access in return.

The most serious threat posed by the project will be the detrimental effects that Hydro's 800 workers will have on our communities.

Ontario Hydro has said that no Anishnabeg will be allowed into their workers living sites, assuming that it is us who will instigate trouble.

What we would like to ask them is how they are going to keep their workers out of the bars in Armstrong and away from our young women? This large a number of single men can do an amazing amount of damage to the well being of our people. Might we suggest that they provide their own drinking establishments on the construction site as well as bringing in outside prostitutes for their workers.

We do not wish to oppose the Little Jackfish Project, however we cannot accept the development as it has been presented to us.

Ontario Hydro has told us they will provide little employment for the Anishnabeg, since they consider us lacking in skills, and they have already signed agreements with unions to employ only union help.

We don't expect to work as engineers, or geologists, but why can't we work as labourers, heavy equipment operators, and cutters. There must be a whole host of jobs which require a minimum of education and training.

Ontario Hydro, and the unions they have commitments to, must come to some



arrangement to allow special status for projects north of the 50th parallel that would allow the hiring of non-unionized Anishnabeg labour.

To do less than this would be unacceptable to us. Developments in our lands have been for too long put in place without our consent, and with no concern for our well being as a distinctly unique people.

#### Problems

- loss of land now used by the Anishnabeg and disruption of surrounding wildlife habitat
- increased pollution of the Ombabika Bay with silt from the flushing actions of daily dam draw down
- opening up the area to outside non-Anishnabeg hunters and fishermen
- social problems in all of the communities from the large influx of outsiders
- no jobs available to us
- no electrical power for the communities of Armstrong, Mud River, Ferland, or Auden
- no improvements to the communities services after the project has been completed

#### Solutions

- Anishnabeg hunters and trappers who are displaced should be relocated and given financial assistance in setting up new traplines
- money paid for water rental fees to the provincial governments be designated specifically for fisheries improvement on Lake Nipigon ie. building hatcheries for restocking the lake
- all outside hunters and fishermen should be required to have an Anishnabeg guide
- provide workers with their own recreational facilities, drinking establishments and bordellos on the construction site
- hire Anishnabeg workers, at least 60% of the available male and female work force
- provide electricity for all of the communities
- buildings declared surplus should be given to the communities and not sold to private businessmen





# Timmins Chamber of Commerce

January 5, 1983

Commissioner Ed Falgren  
Royal Commission on the Northern Environment  
215 Red River Road  
THUNDER BAY, Ontario  
P7B 1A5

Dear Mr. Falgren:

This submission will address itself to one major requirement for the people of Northern Ontario; primary employment.

While employment generally means getting paid for coming to work, more emphasis is required on that type of employment which produces usable and saleable material. The proceeds of this production are recycled and many other kinds of employment become affordable, including a Commission of this type.

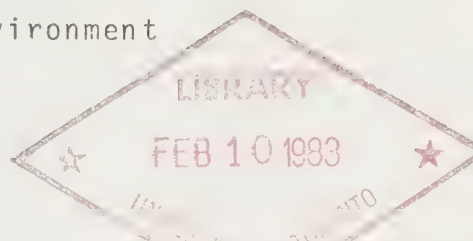
Primary or production employment in Northern Ontario stems mainly from the sale of Natural Resources in the form of wood fibre, minerals and aesthetics. Largely due to major increases in productivity in the resource sector, the proportion of primary to service jobs is changing constantly. A projection of this kind of experience will ultimately result in reduced influence at the political level in Ontario as well as a drop in standard of living and services.

For an example of this, one should compare the relatively recent experience of the communities of Timmins and Kirkland Lake. Both were undergoing severe financial adjustments as a result of diminishing gold ore reserves; however, one major base metal find by the then Texas Gulf group, restored Timmins to a relatively prosperous level where Kirkland Lake's road continued downhill.

On a parallel in the forestry sector, the plight of the Towns of Hearst and Chapleau rests entirely on our ability to provide adequate levels of mature timber for harvesting, a prospect that is somewhat doubtful at the present time. What happens to the owner of a home, drugstore or service station when the sawmills are closed? Job creation projects such as establishment of community colleges and the chasing of tourist dollars tend to wear thin with time and in most cases those communities begin to stagnate and lose their vitality.

We were successful in converting Geraldton from a mining to a forestry community and White River from a railway to a sawmilling town, but unpainted storefronts in Beardmore, Matachewan and Gowganda are examples of where we failed. That kind of failure was catastrophic to those who had roots there.

2....



All of the above leads me to conclude this submission with a plea that the Commission make a very strong recommendation for adequate regeneration of the vast forest areas of Northern Ontario.

If we can grow twice as much fibre volume per unit of area through intensive forestry, the industry would need to occupy only half as much total area, leaving the balance to other users. Furthermore, intensive forestry tends to develop high levels of employment throughout all the rotation stages from renewal to tending and harvesting.

Yours truly,



W. C. SCHURE,  
Chairman, Resources Committee

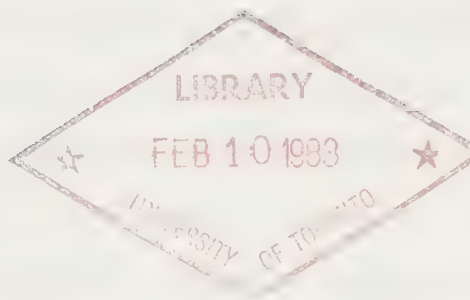
TIMMINS CHAMBER OF COMMERCE

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141  
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Chairman  
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January 10, 1983

Mr. J. E. J. Fahlgren  
Commissioner  
Royal Commission on the  
Northern Environment  
215 Red River Road  
Suite 201  
Thunder Bay, Ontario  
P7B 1A5



Dear Mr. Fahlgren,

Enclosed is the submission of Hollinger Argus Limited to the Royal Commission on the Northern Environment. It was prepared by myself and approved on behalf of Hollinger Argus Limited by Mr. C. B. Ross, Executive Vice-President. I would be willing to present orally this submission to your hearing in Timmins in mid February, 1983.

Thank you for the opportunity to present the views of Hollinger Argus Limited to your commission.

Yours truly,

*J. B. Stubbins*  
J. B. Stubbins P. Eng.

JBS:as  
Enc.

*Rec'd Jan. 12/83*



14  
January 10, 1983

The Need for a Favorable Regulatory Environment  
to Encourage Mine Development

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I wish to make a submission on behalf of Hollinger Argus Limited. Hollinger Argus, formerly called Hollinger Consolidated Gold Mines when it operated the mine here in Timmins, carries out exploration work looking for new mines. Some of the company's exploration from time to time is carried out North of 50<sup>0</sup>. Therefore, we have an interest to ensure that any success we might have in our search would not be frustrated by a mine development climate that would inhibit a successful mining operation.

The Ontario Mining Association presented a brief to this commission in Nov. 23, 1977 and a second submission Dec. 2, 1982. Hollinger Argus is a member of this association. My submission today is to provide support for the OMA recommendations.

1. We support the recommendation that a mining company with a proposed project should negotiate with one lead agency of the Provincial Government. The lead agency's roll would be to coordinate the process of providing information and getting approvals.
2. We support the recommendation that the approvals process should have specific and reasonably short time limits within which government agencies must respond.
3. We agree that the approval process must be flexible, be adapted to and suitable for the specific project for which approval is being sought.

4. We concur that this commission should recommend support for exploration and mining development North of 50°.

We also believe it would be timely and helpful if the commission were to lend its support to those who are opposing the Federal Government's plan to tax benefits that are received by those working in the north.

In support of these recommendations we find that the existing regulations inhibit mine development because they cause delay and increase costs. As an example, I am working on obtaining approvals for a small mining project. It does not come under the Environmental Assessment Act but a number of approvals are required. Eleven months after submitting a report to the Ministry of Environment I have yet to receive an indication of whether the project will be approved.

On mining projects it is desirable to have a staged approvals process to prevent costly redesign work. The approvals process should require an initial approval of the general concept of the project. This would allow the detailed engineering to be carried out with some confidence that only revisions might be required. For example, in the approval of a tailings pond, the site itself would be approved in the initial stage and then the site investigation and design of the facilities could be done with the knowledge that all the work would not be made useless by a request to change to another site.

An example of the time and cost required for public participation under the Environmental Assessment Act is the "power supply to the Kirkland Lake Area" currently being carried out by Ontario Hydro. Quite frankly, few private company projects could afford to submit to such a lengthy and costly process.

COMMENT on the ROYAL COMMISSION STUDY

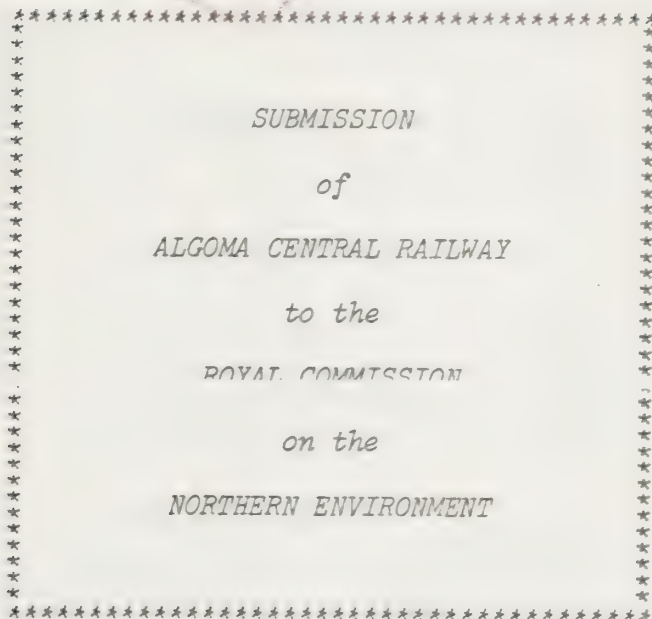
In addition to the support for the Ontario Mining Association's recommendations I wish to comment briefly on the Royal Commission's study "The Road to Detour Lake" an example of the Environmental Assessment Process in Ontario. The report is a detailed analysis of a case and is very readable. It is very critical of what happened to the Environmental Assessment Act requirements when the approval for the road was handled. The comment I wish to make is that the authors displayed a lack of understanding of how a proposed project gets developed in the private sector. There are hundreds of restraints and conditions other than the Environmental Assessment that must be considered. Most must meet decision deadlines. Most decisions depend on other decisions that have been made - that is, there is a sequence of inter-dependent decisions. Since the restraints and conditions do include environment decisions, there is no way that most projects



could survive a two year assessment process that does not allow some aspects to be finalized at an early stage. Rather than view the road to Detour Lake as an exception I believe it would be realistic to recognize that most projects will require that the regulations have flexibility and can accommodate time deadlines as illustrated by the Detour Lake road project. It was the weakness in the act in not being flexible enough to accommodate needs of the Detour Lake road assessment not in the events that took place in trying to accomplish the task. If the environment assessment process is not made flexible enough to accommodate this need then Ontario will inevitably have few new projects. In reading the report of the Royal Commission, it appeared the authors viewed complying with the Environment Assessment Act as an end in itself. Instead, I suggest we should look at the result. Clearly the report did not indicate that a better result could have been achieved other than the possibility of not building the road. I would also like to point out from the excellent viewpoint of hindsight that if the Mine Project decision had been delayed for a few more months by the road decision it would likely have been delayed much longer by a precipitous fall in the gold price. The result would be that the jobs now being provided by the construction at Detour Lake would not be available today. Northeastern Ontario would have their own version of the Alsands fiasco. Instead of condemning the government officials for exempting the road rather than see it delayed, I would like to acknowledge their foresight.



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December 1982





SUBMISSION  
*of*  
ALGOMA CENTRAL RAILWAY  
*to the*  
ROYAL COMMISSION  
*on the*  
NORTHERN ENVIRONMENT

# ALGOMA CENTRAL RAILWAY

W LEONARD OLIPHANT R P F  
MANAGER LANDS & FORESTS DIVISION

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SAULT STE MARIE, ONTARIO  
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1983 01 10

Royal Commission  
on the Northern Environment,  
215 Red River Road,  
Thunder Bay, Ontario.  
P7B 1A5

Dear Sirs:

Algoma Central Railway is a diversified Company whose activities include the operation of water, rail and road transportation systems, the development and operation of commercial real estate, and the management of extensive land areas for multiple purposes.

The Company owns 321 miles of mainline railway running from Sault Ste. Marie to Hearst with connections to the main inter-continental railway lines and also to Great Lakes Shipping through its facilities at Michipicoten Harbour.

We own and operate a modern fleet principally serving the Great Lakes, the St. Lawrence Seaway, the Gulf of St. Lawrence and some Atlantic ports.

Our trucking and warehousing operations service an extensive area of Southern Ontario, Quebec and Michigan through several wholly-owned subsidiary companies.

Another wholly-owned subsidiary has developed and is operating a commercial real estate complex containing a shopping mall, hotel, business office and residential apartments in Sault Ste. Marie. A similar complex in Elliott Lake was developed and is being operated by this subsidiary. We also participate in a Florida, U.S.A. development.

Our Company also holds large blocks of private lands in Northern Ontario which are located in the Sault-Wawa area and which we administer for forestry, mineral and recreational purposes.

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Our interest in the area North of Fifty is both general and specific. In general we wish to see the area developed in a manner which will provide optimum economic and social benefits for the Province, and particularly for the people of Northern Ontario, while providing any necessary protection for the natural environment. Our specific interest in the area arises more predominantly in the area north of and tributary to the town of Hearst which is the Northern terminus of our rail transportation system. It includes a potential silica-kaolin development located approximately 40 miles north-east of Hearst which is under lease to our Company from the Crown. We regard the area north of Hearst as a frontier area which will require future consideration by our Company regarding potential transportation services. Our rail service connects with inter-continental lines and will provide the most direct route southward with a gateway to U.S. markets at Sault Ste. Marie and it will also provide the shortest connection with Great Lakes Shipping through our facilities at Michipicoten Harbour. Our Company's past successful involvement in the fields of transportation, real estate development, tourism, recreational development, forest products and mineral exploration could lead us to an examination of these potentials in the North of Fifty Region.

The Commission has indicated that it is presently focusing on the improvement of procedures for reaching decisions about development and environmental protection and the securing of more effective participation by the public in those procedures.

We would like to suggest that there are numerous well documented planning procedures involving public participation which have been used in Ontario and that an examination of the more appropriate ones will indicate a suitable process to be followed by the Commission. We believe that it is obvious that no procedure will be to the satisfaction of everyone and the pursuit of any such quest would be time-consuming and futile. We have confidence in the Commission's ability to select a hearings procedure which will be reasonable and suitable to the circumstances without any further substantial public input on the matter.

The Commission has also indicated that it will investigate ways of ensuring that resource-based development proceeds in a manner that is more orderly and beneficial and less damaging in its economic, social and natural environment effects than has been the case in the past. In this regard it is suggested that an unique opportunity for planning excellence does exist for the study area. The absence of any extensive development north of Fifty and the present availability of considerable expertise and experience in the various aspects of resource development planning should obviate many of the serious planning problems encountered in the past in other areas.

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As an over-all planning principle it is suggested that minimum planning control consistent with proper economic, social and environmental considerations is an appropriate planning objective. It is felt that governmental intrusion into the developmental process through planning controls should be minimized whenever it is proper to do so and wherever any options may exist. It is also further suggested that unrealistic environmental constraints and social allocations will impact more severely on economic development in the area North of Fifty than in other areas. Economic development appears generally difficult for the area and therefore it is essential that the over-all thrust of planning must be directed toward the enhancement of economic development and not the deterrent of it particularly when trade-off situations are encountered.

PLANNING HIERARCHY We believe that it is essential that a proper planning hierarchy or framework should be established for North of Fifty from the outset. Much of the planning effort to date in our Province has been fragmented, isolated and single purpose, resulting in substantial dilution of the over-all planning result. We feel that planning data must flow both downward and upward in a planning regime but that over-all control should flow downward within the over-all framework. A provincial planning design should provide the over-all framework for regional planning within North of Fifty. The regional plan should meet and operate within Provincial objectives and constraints. Within the North of Fifty Region it would seem logical to consider subdividing the Region into two planning districts based on broad land-forms as indicated by surface relief and general soil or bed-rock material.

Planning problems within each of these districts would be somewhat reduced in that generally similar land areas would be included presenting generally similar land use planning problems in one planning district. A cursory examination of the land classification maps for the area will show the region as being readily divided into two reasonably homogeneous land based areas. It is hoped that in the establishment of planning districts the commission will not necessarily conform to artificially set administrative boundaries.

It should be observed that some planning considerations for North of Fifty should take into account both national and inter-provincial involvement. Such items as off-shore resources, national defence, emergency services, transportation, communications, resource research, etc. will involve cooperative planning with agencies outside the Region and outside our Province.

RESOURCE PLANNING Strategic land use planning by region and district has been making slow but more or less commendable progress in our Province. It will become the basis for resource development in

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Ontario. It is suggested that a broader more comprehensive planning regime can be utilized for an integrated planning program for North of Fifty. The land use planning should be better coordinated with over-all economic and social planning for the area to ensure that appropriate and practical planning objectives are determined and can be realistically met. Such integration will assist in the rationalization of infrastructure development appropriate to the area's resource base and to its social needs. The resource base appears limited and effective rationalization appears more necessary than in other more attractively endowed areas.

It is further suggested that the land use planning strategies generally used south of Fifty should be expanded to give more consideration and planning attention to our water, air and energy resources. In this regard we believe some consideration must be given not only to land classification by use but also to water and air areas. While in general we are supportive of the multi-purpose use of water and air areas it is conceivable that as an aid to development in marginal situations some waterways and air-space should be designated specifically for industrial purposes. Future conflicts may be reduced by the opportunity being presented for more long-range integrated resource, economic and social planning with the over-all objective of providing a proper balance between resource development and the protection of those resources and the natural environment.

SOCIAL PLANNING Social planning to assist in meeting the needs of people with regard to health and safety, education and training, community development, travel and communications, spiritual needs, governmental services and governmental representation have been well documented. People as a resource and their absence from this planning area may provide one of the more difficult planning problems.

It is suggested that the area might be considered suitable for some form of correctional services programs wherein remoteness would perform as an obvious aid to security and at the same time such institutions could assist with infrastructure development both through their presence and their programs.

RESEARCH There appears to be many unknowns yet to be resolved which could affect the development potential of the area. Such problems as difficult access, biting-insect control, mineral exploration through deep over-burden, muskeg drainage, cold-weather and perma-frost construction, transportation and communication corridors, etc. while not unique to the area do present serious developmental problems. It is suggested that resource planning should include a research element to ensure an adequate consideration of those research needs.

It is suggested that many of these problems may be associated with national defence as well as area development and a natural defence research program in the area could assist in addressing these mutual problems on a cooperative funding basis.

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LAND OWNERSHIP An important and basic consideration in resource development involves land or resource ownership or alienation procedures. It is suggested that resource disposition by agreement, license, lease, permit, etc. as historically used in the larger part of Northern Ontario has resulted in serious conflict of users, poor or single resource management, monopolistic planning, etc. Forest Management Agreements recently introduced in Ontario appear to do little to solve these problems. They do not provide any positive incentive for the wood-using industries to accommodate the recreationalists. It is suggested that the best integrated natural resource development to date has taken place outside of Ontario on privately-held lands. This suggests that serious consideration should be given to the encouragement of the disposition of a reasonably substantial portion of the land ownership North of Fifty to private interests for multiple resource development by the owners as a balance against and for comparison with those areas retained for development under public ownership. This suggestion is made knowing that proper control of any private development will be available to effectively protect the public interest through appropriate legislation. Also in making this suggestion it is visualized that appropriate advance planning will be carried out to ensure the establishment of proper communication and service corridors throughout the region.

The settlement of outstanding native land claims should receive high priority.

GENERAL COMMENTS A cursory review of the Ontario Economic Atlas and its presentation of data respecting the area North of Fifty is a reflection in general of developmental problems in the area. Resources are scarce, markets are distant, the climate is inhospitable, the topography is unexciting, infrastructure is lacking, when compared to other parts of our Province. This suggests that new approaches, innovative thinking, different values should be acknowledged when considering the future development of the area. On the other hand the area enjoys vast uncrowded land areas, clean water resources, clean air, long snow periods, good fishing, hunting, snowmobiling, cross-country skiing, snowshoeing, undeveloped forest resources and undiscovered mineral, oil and gas resources. All of which suggests the area does have a special potential which will require special planning and developmental procedures.

#### SUMMARY

1. Our Company does have a general interest in the future development of the area North of Fifty and a specific interest in the area north of and tributary to the town of Hearst.
2. We believe that the Commission itself should proceed immediately with the establishment of procedures to reach decisions with provision for public input on the basis of the more appropriate procedures now being used in our Province.

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3. We believe that resource planning should be integrated with economic and social planning and should be carried out within a provincial planning framework along with consideration of appropriate inter-provincial and national concerns.
4. We are generally supportive of multi-use development but believe that marginal economic conditions may require special consideration for the promotion of industrial and commercial development in this special region.
5. We recommend that district planning within the North of Fifty Region should be based on homogeneous land-forms within the Region rather than on artificially determined administrative districts.
6. We recommend that planning controls and thus governmental intrusion into the developmental processes should be limited to that which is consistent with proper economic, social and environmental protection.
7. We believe that research should be an important element of the resource development planning for North of Fifty.
8. We recommend that early consideration and determination of the most appropriate method of resource allocation and land ownership or alienation be carried out.
9. The area has serious developmental disadvantages and interesting developmental potentials. It is an important region and the last frontier area in the Province. We believe that it presents an unique opportunity for comprehensive and integrated resource development planning.

We wish the Commission success in all its endeavours.

Respectfully submitted,

WLO/BJM

*A. Cupka*  
/v

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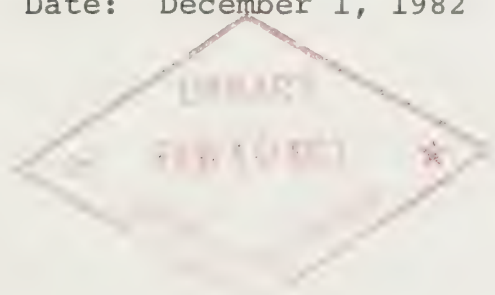
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— HS 149 is an update of HS 112  
New Post Band #69 —

HS  
149

SUBMISSION TO THE  
ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT  
ON THE IMPACTS  
OF THE  
COCHRANE DISTRICT LAND USE PLAN  
AS PROPOSED BY THE  
MINISTRY OF NATURAL RESOURCES

Brief Prepared By The  
New Post Band #69  
Date: December 1, 1982



SUBMISSION TO THE ROYAL COMMISSION ON THE  
NORTHERN ENVIRONMENT BY THE NEW POST BAND NO. 69

I.     INTRODUCTION

This submission has been prepared by the New Post Band No. 69 in fulfillment of an agreement between the Royal Commission on the Northern Environment and the Band. The New Post Band Council has attempted to facilitate the work of the Royal Commission by addressing the subject matter of the inquiry as outlined in the Order in Council of July 13, 1977: "to inquire into any beneficial and adverse effects on the environment . . . of any public or private enterprise" and "to inquire into the methods that should be used in the future to assess, evaluate and make decisions concerning the effects on the environment of such major enterprises."<sup>1</sup>



## II. PROJECT DESCRIPTION

The New Post Band has formulated the following project objectives:

1. To understand the Cochrane District Land Use Plan and its implications for local and traditional uses and to understand the proposed nature of the ongoing planning process;
2. To state concerns with the plan and specify conflicts between the views of the Band and the proposal options for the use and development of land in the Cochrane District;
3. To state the concerns of the Band regarding the future development of the area and the role that the original people wish to play in both traditional and non-traditional resource land use and development;
4. To recommend amendment to the decision making process that would allow the original people greater participation and input into the future of the area. The project has involved a review of documents related to the Cochrane District Plan, a discussion and survey of membership opinion concluded at a general band seminar, and a compilation and analysis of the fundings of both.

### III. LOCAL AND TRADITIONAL USERS (PARTICIPATION)

The Ontario Ministry of Natural Resources has stated that it will:

"actively involve local people and traditional resource users in the preparation of its land use plans. The public participation program will emphasize the identification and consideration of the needs and wants of this group as a priority . . . Native people living in Northeastern Ontario are among the local and traditional users of certain natural resources. When plans are being prepared the urgent need to communicate effectively with the people must be recognized."<sup>2</sup>

The people of the New Post Band are the original occupants of much of the area covered by the Cochrane District Land Use Plan; their Reserve and their traditional lands are located near the centre of the Cochrane Planning Area. Though the population of the New Post Band is small in relation to the total population of the Cochrane District, the interest of the New Post people in the land is not proportionally diminished. The Strategic Land Use Plan for Northeastern Ontario recognizes this and states that the resource rights of Treaty Indians will be one of the four priorities guiding the allocation of resources within the Region. Nevertheless, the Cochrane District Land Use Plan implies that the resource rights of the New Post people are limited to the area within the boundaries of the Reserve. The recognition of the existence of a Status Indian presence in the planning area is largely

confined to a statement that the development of the New Post Reserve's resources should be compatible with the management of surrounding Crown Lands. There is no suggestion that, perhaps, the surrounding Crown lands ought to be managed in a manner compatible with the future of the New Post people so that traditional rights to certain resources are safeguarded. There is no suggestion that the needs and wants of the New Post people have been given priority.

The membership of the New Post Band was manifestly not consulted during the plan making process and remained vertically unaware of the existence of the plan until an 11th hour invitation to attend an open house to comment on the proposed policy and plan options. The Band rejected this after the fact approach to consultation and refused to participate in any process that reduced this special status as original inhabitants to the same level as the public at large.

Obviously, there is a disparity between the local and traditional user policy and the application of that policy at the District level. This gap may result from a complex of factors, or it may result from simple oversight. It may be that the District level planning process cannot reasonably be expected to reconcile the conflict inherent in the linking of priorities at the Regional level:



"The allocation of the Region's fish and wildlife resources will be guided by the following priorities:

1. Maintenance and/or rehabilitation of the resource;
2. The resource rights of Treaty Indians;
3. Recreational benefits to the residents of Ontario; and
4. The greatest economic benefits to Ontario."<sup>3</sup>

It may be that the District level planning process has been influenced by the amiguous status accorded Indian Rights in the Regional document:

"The existing Treaty and Aboriginal rights as referenced in the Canadian Constitution will be further defined at future Consitutional conferences."<sup>4</sup>

Such constitutional change is purely speculative and there is no reasonable expectation that Ontario will be supportive of changes that elaborate Treaty and Aboriginal rights. Indeed the ongoing abrogation of existing rights may render future change meaningless.

It is the intention of the New Post Band to make such recommendations for change as can be initiated within the context of current legal and governmental processes, without prejudice to future consitutional discussions.

The Royal Commission in its report, The Road to Detour Lake, states that its task is to "explore various means of ensuring that Northerners are involved in decision-making on issues that affect them."

The Ministry of Natural Resources, on its side, has stated that "the application of local and traditional user policy may be modified in response to the recommendations of the Royal Commission on the Northern Environment."

The New Post Band believes that, if suggestions for change are received with trust and imagination, the Indian people may once again become full and active participants in the future of the land that has always been their homeland.

#### IV. THE NEW POST BAND

The population of the New Post Band is approximately 72 persons. Every present Band member belongs to either the Archibald or Sutherland family. The New Post Indian Reserve has never been occupied and there is no "on-reserve" population. Over the years the absence of a home community has caused the people of the Band to become dispersed throughout the North; the large part of the Band, however, still lives in the Cochrane area.

The administration of the New Post Band falls within the James Bay District of the Department of Indian Affairs, Ontario Region. The New Post Band is a member of the James Bay Tribal Council along with the Indian communities of the Ontario portion of the Hudson's James Bay coast, (with the exception of Fort Severn which is affiliated with Kayanha Tribal Council).

On the national and international level of political interaction the Band is represented by the Band Council of Treaty No. 9 - the Nishnawbe/Aski Nation.

By reason of the membership's off-reserve residence status, the Band has not been the recipient of many of the Federal programs normally received by the Status Indian population of Ontario.

Recently, the Band has begun to receive funds for organizational purposes which have enabled the membership to come together for regular general meetings. The focus of the several Band



meetings that have been held has been the acquisition of a site for a "home community". The location of the present unoccupied reserve does not favour the development of a new townsite. Remoteness, lack of access and the complex lack of infrastructure have all been considered as factors in prompting the Band to look elsewhere for a suitable home community site.

The New Post Band members have continued to utilize the resources of the land around their present reserve but no one has yet taken up full time residence on the reserve. Island Falls was the community location for the Band membership up until the early 1960's. Perhaps the location of the designated reserve was less than satisfactory as a site for a community. The Treaty commissioners describe the site of the Hudson's Bay Company's New Post, which was the locus of the Band's activities, as being on "a beautiful bend of the Abitibi River and commands an excellent hunting country". Of course, in the days before road and rail, rivers provided the means of transportation and communication; the Hudson's Bay Company had given much thought to the location of their 'New' Post.

Why then did the New Post Indian people choose a reserve site some "eight miles inland from New Post" situated so that the reserve did not touch on with New Post Creek or on the Abitibi River? In fact, they had no choice since an agreement between Ontario and Canada had already stipulated that "no site suitable for development of waterpower exceeding 500 horsepower shall be included within the boundaries of any reserve."<sup>5</sup>

By coincidence, the site of one of the few reserves never to be occupied is adjacent to the site of the Abitibi Canyon Generating Station, which was at one time the largest installation in the province; today the only road access approaching the reserve is across the power dam.

V. THE NISHNAWBE/ASKI: THE PEOPLE AND THE LAND

New Post Band members are part of a larger community known as the Nishnawbe Aski - the Ojibway and Cree people of what is now Northern Ontario. In Ojibway, the word Nishnawbe means the People; in Cree the word Aski means the land. Together the words symbolize the unity of man and the land. The Nishnawbe Aski did not believe that man could own the land anymore than man could own the sky. Man could share the land with other creatures; man could move across the land to hunt, trap and fish. With the passage of time, families or groups of people could come to be associated with a particular area. Certain lands could come to be known to them as the traditional area occupied by a particular group of people. Affiliated groups of people would in turn recognize the right of each group to enjoy the use of certain lands; together the common rights of all the people amounted to sovereignty - that is - the right of the Nishnawbe Aski to occupy the land as Sovereign People. Still, the concept of sovereignty cannot be equated with the concept of ownership of property. The land belonged to the Nishnawbe Aski in the same way that Britain belongs to the British. The land could no more be sold than sovereignty itself could be sold. The attitude of the encroaching society was, of course, quite different.



VI. NEW POST AND THE TREATY

On August 21, 1905, the James Bay Treaty, or Treaty No. 9, was signed at New Post by Angas Weenusk, John Luke and William Gull on behalf of the people of New Post. Genealogical research by the New Post Band shows that these three men left no progeny and none of the present membership is descended from them.

"For one week we were engaged with the strong rapids of the Moose and Abitibi River, and did not reach New Post, our next point of call until 12:30 on Saturday, the 19th. New Post is a small and comparatively unimportant post of the Hudson's Bay Company. It is situated on a beautiful bend of the Abitibi River, and commands an excellent hunting country. The post is in the charge of Mr. S. B. Barrett, and nowhere was the Commission received with greater consideration and hospitality than at this place. The New Post Indians, although few in number, are of excellent character and disposition. They met us with great friendliness. The treaty was concluded on Monday, the 21st, and the Indians were at once paid. The reserve question was also discussed, and the location finally fixed as shown on the schedule of reserves. One of the leading Indians, Esau Omakess, was absent from the reserve during the negotiations. He, however, arrived during the time the payments were being made, and signified his approval of the action being taken by his fellow Indians. He was subsequently chosen unanimously as chief of the Band."<sup>6</sup>

Accordingly, the Band was allocated a reserve of eight square miles which followed from the Treaty formula of one square mile per family of five. From the Schedule of Reserves appended to the James Bay Treaty the description of the New Post Reserve lands is as follows:

"In the Province of Ontario, beginning at a point one mile south of the lake known as Taquahtagama, or Big Lake, situated about eight miles inland south from New Post on the Abitibi River, thence in a northerly direction about four miles, and of sufficient depth in an easterly direction to give an area of eight square miles."<sup>7</sup>

In addition to this land area each Indian was to be made a present of eight dollars "with a view to show the satisfaction of His Majesty with the behavior and good conduct of His Indians".

Altogether, some ninety thousand square miles of territory were deemed to have been ceded to the Crown by the Nishnawbe Aski. Many opinions have been offered as to the validity of the Treaty but to this report to enter into the intricate legal territory surrounding the interpretation of the Treaty and Aboriginal rights or comment on the validity of the Treaty.

Nevertheless, since the subject matter of this report concerns land use and the New Post Indian people, certain basic questions must be addressed.

It is clear that Indians were not expected to live and survive from the fruits of the land within their reserve. In the report to the Superintendent General of Indian Affairs, Messrs. Scott, Stewart and MacMartin, the three Treaty Commissioners state that:

"it is doubtful whether the Indians will ever engage in agriculture, these reserves, being of a reasonable size will give a secure and permanent interest in the land in which the indeterminate possession of a large tract could never carry".<sup>8</sup>

It should be further noted that Treaty No. 9 had no provision as did other numbered Treaties:

"Beginning with Treaty No. 3 and expecting only Treaties Nos. 9 and 10, additional provisions were included for supplies intended to help Indians utilize their lands."<sup>9</sup>

Treaty 3 contained provisions for the supply of farm implements, animals and seeds "to be given once and for all for the encouragement of the practice of agriculture among Indians."<sup>10</sup> If agriculture was not foreseen as a means of support and self sufficiency it must have been intended that a much larger area of land would provide the means of support through traditional pursuits such as hunting, fishing and trapping. Indeed, the Treaty No. 9 states that:

"His Majesty the King hereby agrees with the said Indians that they shall have the right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered . . . ."<sup>11</sup>

In legal terms these rights can be termed usufructuary rights - jus fructus - the right to enjoy the fruits of the land. Immediately, upon being affirmed in one breath these rights are qualified in the next, "saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes."

Literally interpreted, this qualification could allow land to be "taken up" to the extent that any rights that were recognized, would effectively be eliminated. Surely, this



could not have been the intention of the Treaty Commissioners. It was certainly not the interpretation of the signatories to the Treaty:

"Missaby, the recognized chief of the band, then spoke, expressing the fears of the Indians that, if they signed the treaty, they would be compelled to reside upon the reserve to be set apart for them, and would be deprived of the fishing and hunting privileges which they now enjoy. On being informed that their fears in regard to both these matters were groundless, as their present manner of making their livelihood would in no way be interfered with, they signed the Treaty".<sup>12</sup>

Again, at Fort Hope the Treaty Commissioners explained to the people that "hunting and fishing, in which occupations they were not to be interfered with, should for very many years prove lucrative sources of revenue".<sup>13</sup>

The oral promises made at the time of the Treaty signing support the view that the qualification "saving and excepting such tracts as may be . . . taken up from time", and should not be construed as allowing the unlimited use of land for other purposes. If the land was to provide a lucrative source of revenue then either the right to take up land was a limited right, either temporarily or spatially, or the Indian people have a right to compensation.

This aspect of the Treaty has a direct relevance to land use planning, and land management. While the Treaty does not exclusively reserve the right to hunt, trap and fish to the Indian people, neither does it convey to the Crown the unlimited power to abrogate that right. It follows, then that

both parties have a share in the rights to certain 'ceded' lands. The right to hunt, fish and trap within ceded lands not 'taken up' amounts to a restrictive covenant running with the ceded land. Implicit in the covenant is the notion that there be moose to hunt, fish to fish and beaver to trap. The existence of game, fish and furbearers is dependent upon the extent to which non-Indians harvest them, the extent to which a suitable habitat is maintained and not destroyed by forestry and mining. In addition, the establishment of provincial park or game preserves may also allow the province to prohibit their activities. The New Post Band submits, therefore, that they have direct interest in the terms and conditions governing various land use activities, as land use planning and plan implementation activities may have serious consequences for the rights of the New Post people.

The designation of an area for a Waterway Park and the consequent production of a Parks Master Plan may have the effect of 'taking up land for other purposes'. This has been the effect of Provincial Park status in other areas. It is not acceptable that the right to hunt, fish and trap over an area can be taken away by the stroke of a pen and then conditionally returned as a privilege, pending the results of the Parks Planning process.

Similarly, forestry has in the past been viewed as a temporal activity that constituted the taking up of land for the period of time during which forestry operations were

actually carried out. Now, however, the forest industry is being required to shift from an approach that could be characterized as limited in time, that is cut the trees and move along to an approach that more closely resembles that of the farmer, albeit a tree farmer. No longer will forestry be seen as a short term activity. Rather, it will be an activity that continues throughout the life cycle of the crop farm cutting through to the regeneration of the next crop. It is possible that land will be considered to be 'taken up' for an unlimited time period. The new system of managing the forests through Forest Management Agreements between private industry and government may have the effect of abrogating Treaty rights over vast tracts of land. Surely, this was not the intention of the Treaty. If indeed the lands designated for parks, forestry and other purposes are to be considered occupied, then the New Post Reserve becomes ghettoized, present rights are conveniently turned into privileges.

Implicit, then, in the notion of a restrictive covenant is the agreement that the 'taking up' of ceded lands not be such as to destroy or vitiate the right to hunt, trap and fish.

## VII. SUMMARY

Altogether, the 1905-1906 Treaty signing expedition managed to secure for the Province some 90,000 square miles of territory in exchange for "secured" reserves of one square mile for a family of five.

It seems clear from the notes of the Treaty Commissioners and from the records of the Province and the Dominion that the imminent development of "New Ontario" required urgent action to clarify the title to the land of the north. From references to promises made not to molest newcomers engaged in hunting, mining and forestry and other pursuits, it seems that both governments were clearly desirous of establishing 'peace and friendship' in the face of the impending onslaught of settlement. The Treaty Commissioners reported that:

"as we ascended the Abitibi, evidence of approaching civilization and of railway construction and surveying, which had rendered the making of the treaty necessary, were constantly met with."<sup>14</sup>

The Indian people on their side also seemed concerned that some formal recognition of their rights be concluded before settlement proceeded further. At a meeting with Duncan Campbell Scott in 1899, Indians from the Hudson's/James Bay area stated that:

"They heard that the railroads were projected through their country, and that already mining prospectors and surveyors were beginning to pass through it in such largely increased numbers that the game was disturbed, interference with their means of livelihood had commenced, and their rights were being trespassed upon."<sup>15</sup>



The New Post Indian Band received approximately \$320.00 for the cession of what Scott described as a "vast quantity of waste and at present unproductive land."<sup>16</sup> A scant five years later the same land was being sold by the government of Ontario at the rate of nearly \$10,000.00 per township.

"By 1900 the area immediately surrounding Cochrane has been taken up . . . Lots available to these early settlers were 150 acres in size and for the most part were well covered with merchantable timber. The land was sold as \$0.50 per acre, the settlers undertaking to perform homestead duties to obtain a patent."<sup>17</sup>

Altogether, for the same townships which the New Post Band considers its primary traditional land area, the government of Ontario, by its own actions established a base value of some \$300,000.00 at 1910 levels, excluding, of course, the value of timber, mineral and water power.

Judged by the results, the James Bay Treaty can be viewed as a great success or a failure. The Nishnawbe Aski are nearly unanimous in holding the latter view.

Nevertheless, the Treaty provisions regarding the establishment of peace and friendship between the two societies has yet to be overly breached. Certainly, "the taking up of land for development" provisions of the Treaty have yielded steady dividends:

"The minerals and forests of the north became an important component in the continuing economic development of the south. In particular, Toronto's growth as a financial centre, rivalling Montreal, is derived from its control of northern resources . . . . In the North, a new community emerged, supplementary to the south and dominated by it."<sup>18</sup>

VIII. NEW POST BAND'S CONCERNS

At the general band meeting held in Cochrane on October 15, 16 and 17 of this year, the Band membership reviewed some of the basic implications of the Cochrane District Land Use Plan. The context and scope of land use planning in the Province and the role of the Cochrane District Land Use Plan was outlined. The land use designations, priority land uses for each designated area and the nature of secondary instruments governing primary and secondary uses were presented.

The membership was asked to respond to a questionnaire directed at establishing a spatial expression of the band concern area. Either individually or in small groups, the membership was asked to mark on a topographical map the extent of the land area considered by the individual group to be traditional hunting lands or lands considered to be of prime concern to present members. On this map, members were to mark areas of special significance such as burial grounds, hunting grounds and so on. During subsequent discussions at the band seminar, individual band members further expressed their concerns.

## IX. THE CONCERN AREA

The New Post Band has identified its area of primary concern, as roughly the area south and east from the junction of the New Post Creek and the Abitibi River, roughly bounded on the west by the Abitibi River, and on the east by the New Post Creek/Little Abitibi River to an eastwest line some 36 miles south. The area delineated by the membership includes all of the 12 geographical townships of Pinard, Mewhinney, Mound, Avon, Bourassa, McAlpine, Homuth, Tolmie, Agassiz, Adanac, Menapia and Ireland. (See map A).

This area contains parts of four designated areas in the Cochrane District Land Use Plan. The greater part of the concern area falls within the area designated as the Northern Resources and commercial recreation Area: Area 10 in option one and Area 8 in option two.

The two rivers roughly bounding the area are designated as the Little Abitibi/New Post Creek Water Way Park. (Area 12 in option one and Area 10 in option two) and the Abitibi, Frederickhouse, Driftwood and Onakawana Rivers (Area 6 in option one and Area 8 in option two).

Finally, the Western extent of the Band's concerns area, which lies on the west side of the Abitibi and on the east side in parts of Menapia and Ireland Townships, is designated as the Southern Resource Area (Area 9 in option one and Area 7 in option two).

<u>AREA DESIGNATED</u>	<u>PRIMARY USES</u>	<u>USES PERMITTED WITH CONDITIONS</u>	<u>STATED CONDITIONS</u>
		1 = Primary 2 = Secondary	
Southern Resource Area  (Option 1 = Area 9  Option 2 = Area 7)	Forestry  Mining	Mining (1)     Rural Residential (2)  Aggregate (2)	Operating guidelines, perm licences - Shoreline reserve of 122 metres (maybe)  According to Official Plans  Operating guidelines in permits - not permitted within 122 metres of designated cottage or commercial lakes
		Forestry (1)	Operating guidelines will be contained in approved operating plans for the protection of other values
		Trapping (2)	Encouraged to expand to quota levels - no cabins on cottaging or tourism lakes
		Wildlife Hunting (2) Viewing	Management plans <u>may</u> be formulated for specific High Value areas
		Sport Fishing (2)	Regulated through management plans
		Commercial Fishing (2)	Licences
		Crown Land Recreation (2)	Minor access permitted along with cottaging plans
		Cottaging (2)	Crown land shoreline cottaging <u>encouraged</u> on designated lakes
		Commercial Tourism (2)	Existing use to continue
		Roads (2)	Resource and recreation roads will be permitted. Guidelines concerning permanent road access and shoreline reserves



<u>AREA DESIGNATED</u>	<u>PRIMARY USES</u>	<u>USES PERMITTED WITH CONDITIONS</u>	<u>STATED CONDITIONS</u>
		1 = Primary 2 = Secondary	
Abitibi, Frederickhouse, Driftwood, Onakawana River	Recreation: public recreation, cottaging, commercial tourism	Mining (2)	Encouraged with minimum shoreline disturbance operating guidelines will be reflected in permits and licences
Area defined as 125 metres on each side of high water mark		Aggregate (2)	Permitted where need can be demonstrated. No guidelines.
(Option 1 = Area 6 Option 2 = Area 8)	Hydro Electric Generation	Forestry (2)	Permitted, operating plans will contain guidelines for protection of other values
		Trapping (2)	Encouraged to expand to quota levels
		Wildlife Hunting Viewing (2)	No guidelines
		Sport Fishing (2)	No guidelines
		Commercial Fishing (2)	Present use may continue, new licences will be subject to resource capacity
		Crown Land Recreation (1)	Will promote canoeing
		Cottaging (1)	Cottaging will be permitted on Abitibi River from Gardiner to Island Falls and on Frederickhouse from south boundary to Abitibi (40 units) subject to a Recreation Plan
		Commercial Tourism (1)	Encouraged between Island Falls and Otter Rapids
		Roads: Resource Recreation (2)	Can approach rivers where a need can be demonstrated

NO MENTION OF HYDRO ELECTRIC PLANS NO GUIDELINES

<u>AREA DESIGNATED</u>	<u>PRIMARY USES</u>	<u>USES PERMITTED WITH CONDITIONS</u>	<u>STATED CONDITIONS</u>
		1 = Primary 2 = Secondary	
Middle Detour Lake Corridor Area	Recreation Cottaging	Mining (2)	- operating guidelines will be in licences and permits
Option 1 Option 2 = Area 3			- may be permitted along shoreline
		Aggregate (2)	Encouraged, no guideline may be permitted along shoreline
		Forestry	Approved operating plans will combine specific guidelines for protection of high value areas (moose winter areas will be subject to modified cutting practice)
		Trapping (2)	Expand to quota level no cabins on certain lakes
		Wildlife Hunting and Viewing (1)	Management plans <u>may</u> be formulated for high value areas
		Sport Fishing (1)	Managed by reviews of development proposals
		Commercial Fishing (2)	Regulated through licences
		Crown Land Recreation (1)	Public access will be constructed along Detour Lake highway
		Cottaging	Remote and submission cottages will be encouraged on lakes with approved operating plans. Not permitted on other lakes.
		Commercial Tourism	Encouraged on designated lakes
		Roads	Existing guidelines.

<u>AREA DESIGNATED</u>	<u>PRIMARY USES</u>	<u>USES PERMITTED WITH CONDITIONS</u>	<u>STATED CONDITIONS</u>
		1 = Primary 2 = Secondary	
Northern Resource and Commercial Recreation Area	Mining	Mining (1)	Operating guidelines, licences, permits
	Forestry		
	Commercial	Forestry (1)	Operating plans, guidelines for the protection of other values
(Option 1 = Area 10	Recreation		
Option 2 = Area 8)		Aggregate (2)	Quarry and work permits
		Trapping (2)	Expand to quota (no guidelines)
		Wildlife Hunting Viewing (2)	Habitat Management Plans for high value areas and caribou habitat
		Roads (2)	Guidelines for permanent access roads and shoreline reserves
		Commercial Tourism (1)	Permitted on designated lakes, existing uses can continue

AREA DESIGNATED

PRIMARY USES

USES PERMITTED  
WITH CONDITIONS

STATED  
CONDITIONS

1 = Primary  
2 = Secondary

Provincial  
Parks System

Provincial  
Parks

Provincial  
Park (1)

(Option 1  
= Area 12

Forestry (2)

Permitted only to enhance  
park values

Option 2  
= Area 10)

Trapping (2)  
Wildlife  
Hunting,  
Viewing (2)

May continue pending  
park master plan

Particular  
reference to  
Little Abitibi/  
New Post Creek  
Waterway Park

May continue pending  
park master plan

Crown Land  
Recreation (2)

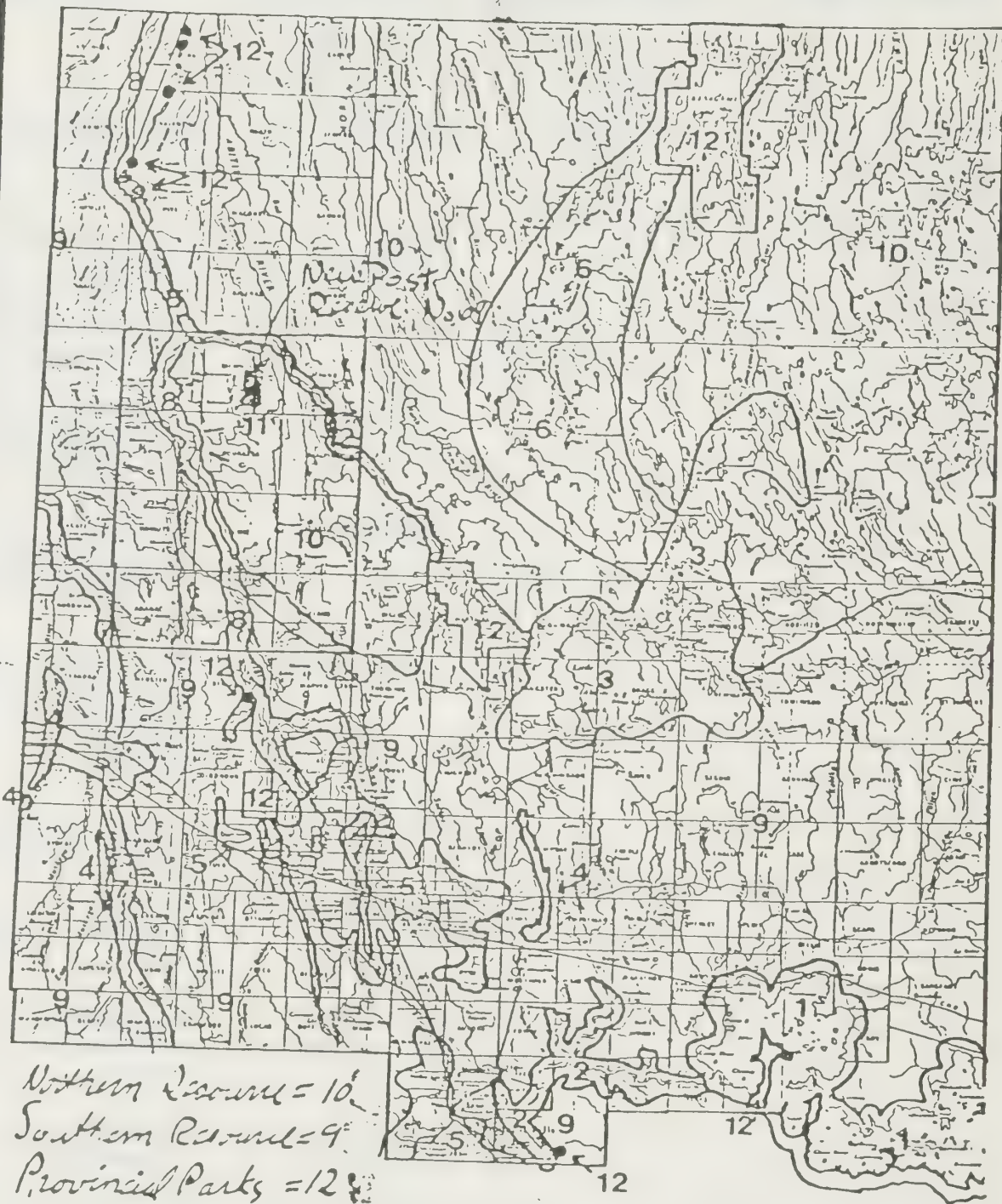
No construction pending  
park master plan

Sport  
Fishing (2)

No guidelines



<u>AREA DESIGNATED</u>	<u>PRIMARY USES</u>	<u>USES PERMITTED WITH CONDITIONS</u>	<u>STATED CONDITIONS</u>
		1 = Primary 2 = Secondary	
Great Claybelt Agricultural Areas	Agriculture	Urban (2)	Municipal planning controls
Option 1		Rural	Only in association with farming
Option 2		Residential (2)	
= Area 5		Agricultural (1)	Land cleared crown land will be made available
		Mining (2)	Encouraged with operating guidelines in licences
		Aggregate (2)	Encouraged municipal planning controls, minimum disruption of agricultural land
		Forestry (2)	Encouraged, operating plans will contain guidelines for protection of other values.
		Trapping (2)	Expand to quota, no cabins on crown land
		Wildlife Hunting Viewing (2)	Habitable management plans for high value areas
		Sport Fishing (2)	Development will be reviewed to protect fishing
		Commercial Fishing (2)	Managed through licencing
		Cottaging (2)	Lake and river plans
		Commercial Tourism	Permitted on Crown land as long as there is no impact on farms
		Roads	Should locate along property boundaries



Northern Reserve = 10  
 Southern Reserve = 9  
 Provincial Parks = 12  
 Abitibi River Area = 8

# DISTRICT DE COCHRANE DISTRICT



0 10 20 30 40 50 60 70 80 90 100  
 Kilometers

## LEGEND/LÉGENDE

### OPTION 1



1

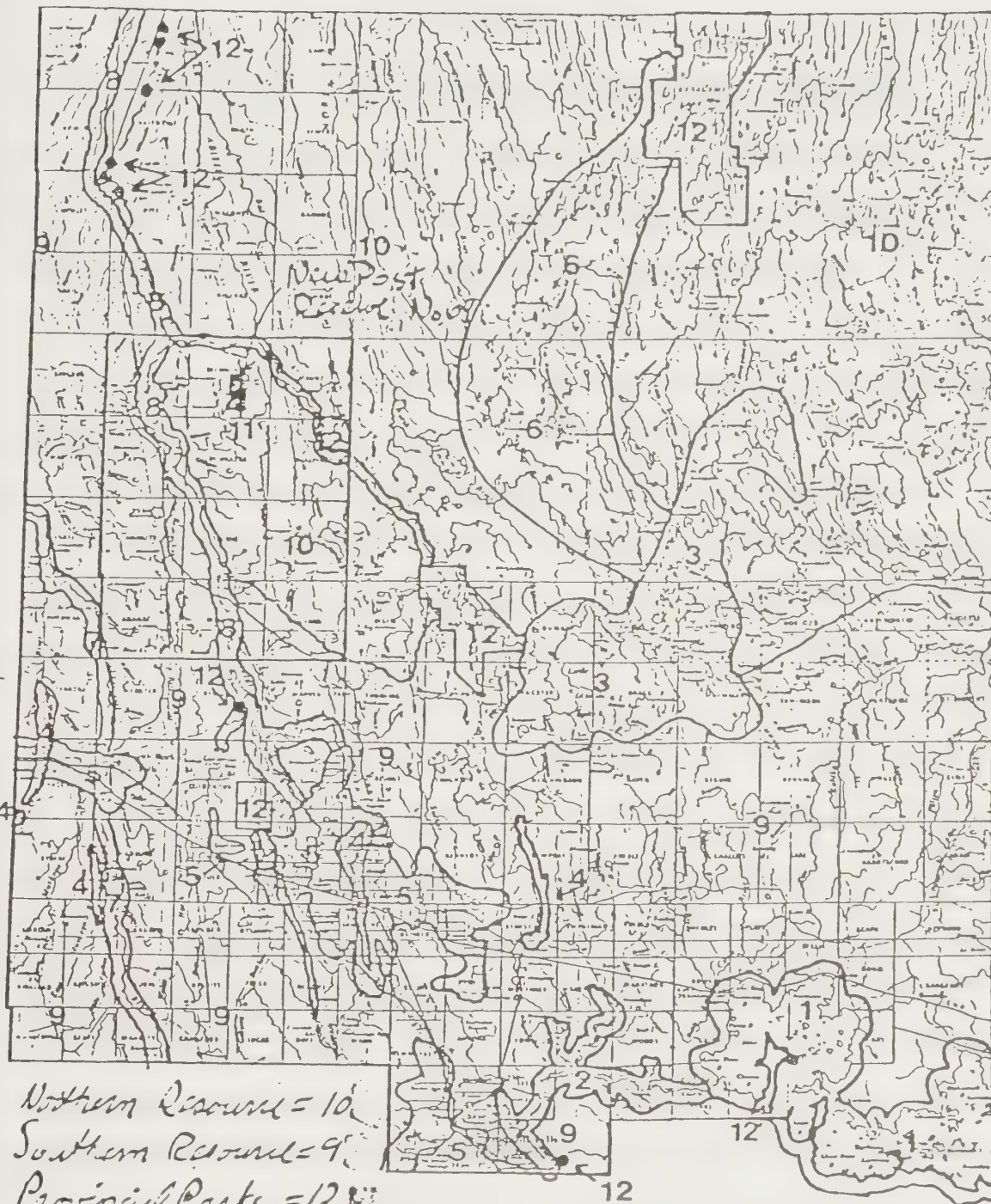
AREA BOUNDARY

AREA NUMBER (see text)



New Post's  
Concern  
Area





# **DISTRICT DE COCHRANE DISTRICT**



Scale 0 1 2 Miles  
 0 1 2 Kilometers

## **LEGEND/LÉGENDE**

### **OPTION 1**



AREA BOUNDARY

1

AREA NUMBER (see text)



*New Post's  
Concern  
Area*

X. TRADITIONAL LAND USE AREA CONCERNS

The New Post Band is specifically concerned with the future use of land within the traditional New Post Land area. From statements and discussions at the General Band seminar and on subsequent occasions, specific concerns have been identified regarding the conservation and development of the natural resources reserved under the provisions of the Treaty.

The plan states that trapping will be encouraged to expand to quota levels in each of the three designated areas of concern to the Band. Within the proposed New Post Creek/Little Abitibi Park area, trapping will be allowed to continue pending the completion of a Parks Master Plan.

The New Post Band is in favour of sound management practices that preserve a healthy self sustaining beaver population. Members of the Band have expressed concern that survey techniques used to ascertain beaver populations may be in error by a sufficient margin to have a negative effect on the stocks through the establishment of artificially high quotas. Some Band members believe that on occasion dead beaver houses have been counted as live houses by aerial surveyors. Aerial surveying may be appropriate for the establishment of population estimates over a large area but it is felt that for smaller areas such as the Traditional New Post Trapping Area, greater accuracy is required. Traditional conservation methods, they may fall short of the established quota, and their continuing possession of a licence to trap in that area may be jeopardized.



New Post members are also concerned that outsiders, particularly status Indian trappers from Quebec have been brought in to the area to trap on New Post's traditional grounds. In one incident, outsiders went trapping within the boundaries of the reserve itself. The Band believes that the Ministry of Natural Resources has actively encouraged the importation of outside trappers into the area.

The New Post Band is concerned that traplines within their traditional land area be preserved for the use and benefit of future New Post trappers. The elders want their grandchildren and future descendants to be able to trap the traditional lands in years to come. The Band has noted that traplines have on occasion been bought and sold as a commodity to the detriment of the collective rights of the Band. Therefore, the New Post Band recommends that all present and future use of the traditional land area be reserved for New Post members and that the use of the area by outsiders, either Indian or non-Indian, be subject to the prior right of the New Post Band.

The Band has noted that the population of beaver within any area is related to population throughout a much larger watershed area. There are annual movements of beaver into and out of areas due to population pressure, habitat and other environmental factors. Therefore, the Band feels that disruptions to the environment in one area may affect beaver

stocks in another area. The Band is concerned that the management of land for the primary benefit of the forest industry both within and outside of the traditional New Post area may have negative impacts on fur bearing species and other wildlife within the traditional area. Cutting practices and regeneration practices which lead to the suppression of certain species are of particular concern. While the plan states that forest practice will be governed by Approved Operating Plans which will contain specific guidelines for the protection of other values, the lack of any published examples of such specific guidelines is not reassuring. While the plan does make reference to the need for the maintenance of significant fish and wildlife populations, and adopts a strategy for protecting and managing fur-bearer habitat, it fails to indicate how the requirements of animal species maintenance will be reconciled with the requirements of the forest industry.

The Strategic Land Use Plan for Northeastern Ontario has stated, that as a general guide, forest reserves may be established up to 120 metres around the shores of larger lakes (40 hectarent) and 30 metres of trout stream which double as wildlife cover. There is no indication that reserves will be required for smaller lakes, beaver ponds or streams which do not contain trout. There is no indication in the plan as to how these minimal reservations will be enforced.

Though the New Post Band is aware that population of large game species, particularly moose, are not spatially static and that animals will move over large areas in response to natural and man made factors, the Band, nevertheless, feels that special policies and practices should be developed for moose management within their traditional land area. The Band supports the statement in the Northeastern Ontario Strategic Plan that "there can be no appreciable loss of hunting area or habitat such as concentration areas, aquatic feeding site, and mineral licks are particularly important to maintaining high moose densities. These special habitats, and to a general degree all moose range, will have to be protected and managed more vigourously than currently practiced".<sup>19</sup>

The Cochrane Plan suggests that a reduction in the number of hunters and active habitat management may be required to increase moose populations. The New Post Band accepts this statement and believes that moose hunting within its traditional land area should be restricted to the members of the New Post Band. Non-Indians hunting within this traditional area should be limited to those authorized by the New Post Band and accompanied by a status Indian guide also authorized by the New Post Band. Thus, the number and the composition of the harvest within the traditional area could be closely controlled while at fee game time, ensuring a measure of economic benefit which would be agreeable to the Band.

Within the area described by New Post Band as their traditional land area, cottaging is not proposed for that position which falls within the Northern Resource and Commercial Recreation Area and within the Little Abitibi/New Post Creek area. The Band is in agreement with this policy. However, in that portion that falls within the Southern Resource Area, inland remote cottaging is permitted in the townships of Pinard, Avon, Homuth, Adanar and Menapia. In addition, the Abitibi, Frederick, Driftwood, and Onakwana River Area will permit the development of up to 40 remote cottages - particularly between Gardiner and Island Falls. The New Post Band feels that cottage development is incompatible with the use of lands for traditional activities. There is a particular concern that hunting in parts of Menapia Township will be negatively influenced.

The Band is also concerned that commercial tourism policies will encourage the development of "outpost camps, lodges, marines and youth camps" along the Abitibi River in the townships of Pinard, Avon, Bouransa and Tolmie. It is felt that this type of development is not consistent with the safeguarding of the Band's traditional right to hunt, trap and fish throughout this area. Similarly, policies for the Northern Resource and Commercial Tourism should discourage tourist-oriented development in the area between New Post Creek/Little Abitibi River and the Abitibi River. If any exploitation of the area's tourist potential is to take place, it must be at the option of the New Post Band.



The New Post Band has a great concern that the proposed Little Abitibi/New Post Creek Waterway Park will have a negative effect on the Band's right to hunt, trap and fish. It is agreed that no further commercial development take place within that area. While the Band is not opposed to the protection of the natural environment implicit in Provincial Park Status, it cannot stress too strongly that it is very much opposed to the "taking up of land for other purposes" that Park Status carries with it. The Band does not wish to see its traditional rights in this area diminished.

Finally, the New Post Band must register its concern that the background document refers to hydro electric potential while the Cochrane District Land Use Plan fails to deal with the problems and conflicts inherent in hydro electric development. The Northeastern Ontario Strategic Land Use Plan states that:

"the six most feasible undeveloped sites of hydro electric potential within the planning region could provide an additional 355 megawatts of average energy output. These sites exist on the Abitibi, Mattagami, Mineasagi and Moose Rivers."<sup>20</sup>

Certainly, the Cochrane District Plan should deal with developments of that magnitude in a forthright manner and wherever "interim uses on lands and waters with significant energy potential which would not preclude their future use for energy production" have been encouraged, the plan should say as much. The Northeastern Ontario Strategic Use Plan clearly implies that socio-economic and environmental concerns

of a local nature will not be allowed to stand in the way of hydro electric development:

"It should not expect that their desires will always be fully met. In some cases it may be necessary to give priority to national or provincial concerns. An example may be energy requirements".<sup>21</sup>

These are ominous words for the New Post Band since they alone, among other bands in the Treaty 9 Area, have for the past 60 years or so, already experienced the effects of placing national and provincial priority on "water power development".

## XI. GENERAL CONCERNS WITH THE LAND USE PLAN

The Ministry of Natural Resources has adopted a top-down rather than bottom-up approach to planning. The approach can be characterized as the systematic reduction of general concepts and broad goals into specific, measurable targets.

"Planning decisions will be made through a hierarchy of planning areas where broad decisions are made before detailed decisions . . . . Through this process, regionally significant prior to the initiation of more detailed district plans".<sup>22</sup>

Therefore, district planning process involves a closer examination of resource to see if the district's share of a pre-set target can be achieved. If there is a mismatch between the expectations of the target and the ability of the land base to accommodate the target, then either:

1. revision must be made to the target; or
2. adjustments must be made to the district allocations of land to competing uses.

A bottom-up approach, on the other hand, could be characterized as successive integration of plans built up from detailed capability information at the local level.

"There are two approaches to land use planning of broad areas. Firstly, a 'mass action' approach may be organized. . . . This approach will present, in very general terms, the present land use patterns of the broad area surveyed. It will also indicate broad policies of recommended land use. However, because of detailed information on basic ecology and land use practices, the findings of this type of survey will have little or no application in the planning of land use and in the administration and management of land at the local level. Furthermore, the fundamental research which underlies this

type of survey will be inadequate because the significance of the inter-relationships of factors within the local patterns cannot be adequately considered. . . . Secondly, there is an approach which begins with the establishment of local reference areas. . . . On these, a detailed study is made of the relationships of the total complex of factors which bear upon the problem of proper land use".<sup>23</sup>

The danger in the first approach, or the top-down approach is that targets will not be revised when a discrepancy exists between capacity and demand. It can be expected that a hierarched, top-down flow of policies, objectives and targets carries with it a certain amount of force or inertia which may not be easily countered. Consequently, the targets for a particular land use will be made to fit within the land base of the district. One way to expand the effective land base is to permit more than one activity to take place in the same area - multiple land use. A multiple land use strategy depends for its success on the several land uses being compatible:

"it is necessary to understand the concept of conflict regarding the uses required to meet the objectives. Uses that are in conflict are those that must be separated spatially. Hence, if one use is permitted the other cannot occur and a trade-off must be made. Some conflicts are absolute or total and others are partial. Wilderness preservation and forest operations are in total conflict whereas cottage use and forest operations could be in partial conflict".<sup>24</sup>

In the Cochrane District Land Use Plan, the area designated as the Abitibi, Frederickhouse, Driftwood and Onakwana Rivers Area is modestly defined as including 125 metres on "each side". The area is described briefly: "Generally the



river banks in this area are steep and composed of relatively unstable soils such as clay". Certainly, it would seem from this description that erosion in this area would warrant special measures over and above a mere 125 metre reservation. Certainly, a long history of river basin planning by the Conservation Authorities under the aegis of the Ministry of Natural Resources would argue for stricter measures.

The multiple use strategy as evidenced in the Cochrane Plan the following uses are among those permitted in this area which has recreation as its primary use: mining, aggregate extraction, forestry, agriculture, cottaging, commercial tourism and roads. If all of this is permitted to take place within 125 metres of the shoreline, of a sensitive area then where is the separation of uses required by a successful multiple use strategy? Acceptance of multiple use strategy depends on either a clear spatial separation of incompatible uses with sufficient buffering between uses or on a clear and precise definition of the conditions governing the performance of various users in order that potentially incompatible uses can be made to take place together, without prejudice to each other. In the absence of either separation or clear performance criteria it must be assumed that certain uses will be dominant uses. Forestry and aggregate extraction are intrinsically dominant that more passive land uses will remain viable if these use are permitted.

The Cochrane District Land Use Plan, however, postpones the debate and asks the public to accept as a matter of faith that uses will be compatible in the future. The plan does not specify the policy, criteria, or guidelines which will govern the performance of dominant use. Instead, the plan alludes to future planning and administrative activities. Such phrases as (mining) "operation guidelines will be reflected in licences and permits", (forestry) "operating plans will contain specific guidelines for the protection of other resource and recreation values", and (roads) "will be permitted to approach the rivers where a need can be demonstrated", are examples of the generalities the plan has to offer.

It is evident that the Cochrane District Land Use Plan is avoiding any real debate on the compatibility of land uses. This is consistent with previous Ministry thinking:

"The planning exercise itself has only a minimal impact. It is the implementation of the plan . . . that [has] appreciable impacts. The impacts resulting from the land management activities such as forest management, cottaging, Provincial Parks and various forms of Crown Land recreation are analysed in the environmental assessments prepared specifically for them. . . . From the perspective of a land use plan, then, the effort to minimize undesirable impacts comes in designating areas".<sup>25</sup>

It would appear that the planning process is not meant to be a forum for the resolution of land use conflicts. It would appear that the existence of an Environmental Assessment Process is being used as an excuse for the postponement of

debate until a stage is reached at which previous planning decisions rule out any possibility of meaningful change. It would appear that the virtues of the comprehensive overview that regional and district planning has to offer is to be squandered by the reduction of the debate to a spatially restricted examination of specific projects and undertakings.

The New Post Band is not convinced that its fundamental rights to enjoy the natural resources of its traditional land area are sufficiently protected by the present planning process.

## XII. RECOMMENDATIONS OF THE NEW POST BAND

The New Post Band wishes to make the following recommendations to the Royal Commission on the Northern Environment:

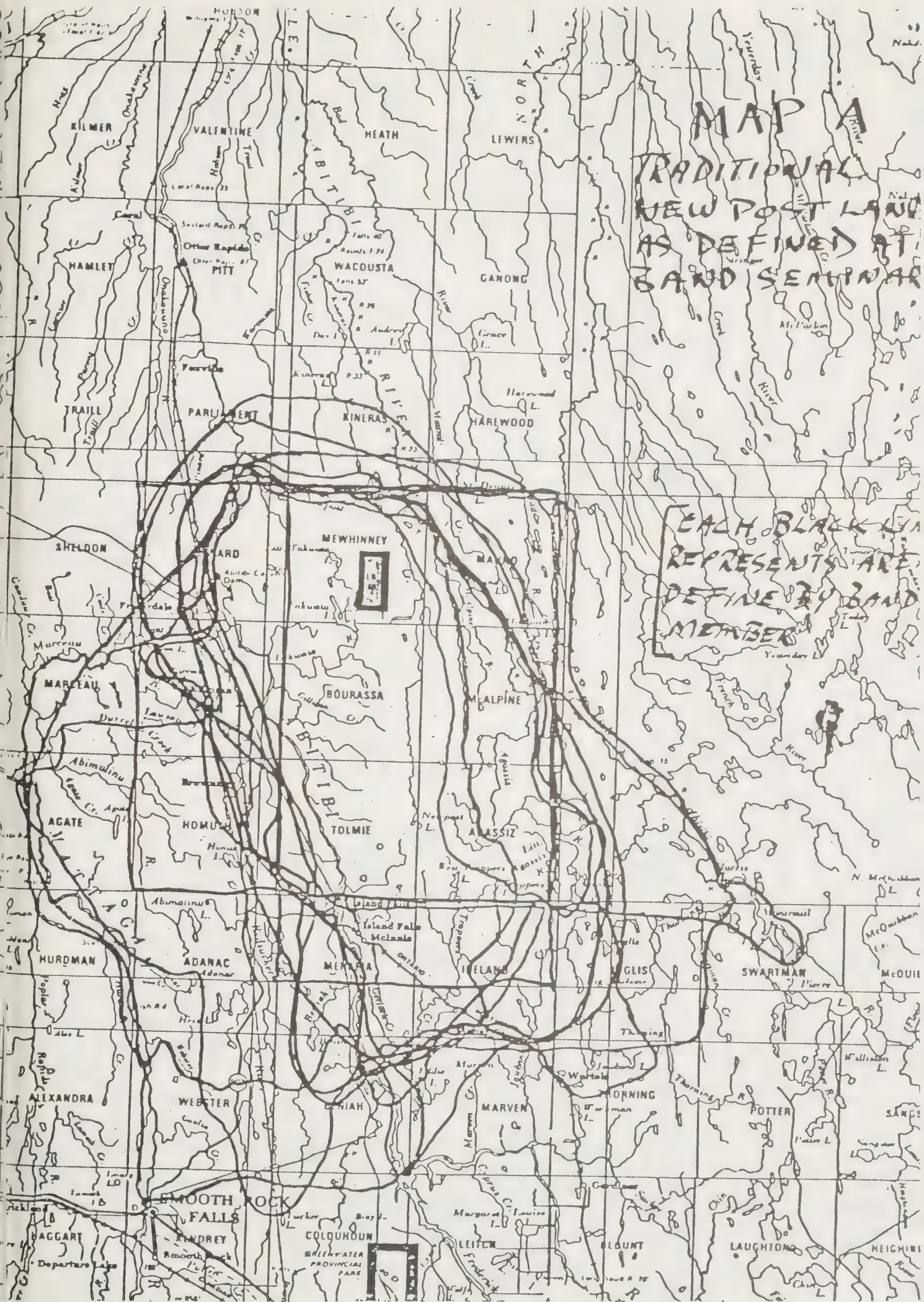
1. The rights of the New Post people to use and enjoy certain natural resources includes the right to ensure that the environment is managed, for the benefit of those resources and the right to ensure that traditional lands are not taken up for other purposes.
2. The Cochrane Land Use Plan should be amended so as to affirm the existence of a special area where in traditional land use activities, specifically hunting, fishing and trapping are considered the primary land uses.
3. This special area should be considered as a secondary planning area which could be called a traditional land use area.
4. Subject to specific discussions, the traditional land use area should be delineated as all of the Townships of Pinard, Mewhinney, Maund, Avon, Bourassa, McAlpine, Homuth, Tolmie, Agassiz, Adanac, Menapia, and Ireland and parts of the Townships of Parliament, Kineras, Harewood, Marrear, Agate, Hardman, Lobster and Geniah, Marvin, Thoining and Inglis. The traditional land use area identified by the New Post Band is shown on the accompanying map.



5. A secondary traditional land use plan should be produced for this area and special policies, objectives, guidelines and criteria drawn up.
6. For the purposes of preparing, implementing, monitoring and amending the proposed traditional Land Use Area Plan, a joint planning and development board be formulated with representation composed of the Chief and Council of the New Post Band and the M.N.R.
7. This joint planning board would be responsible for reviewing all licences, permits, management plans, operating plans and any other proposals, propositions and schemes within the traditional land use area.
8. The joint planning board should appoint an Indian conservation/development control officer to monitor the activities of both traditional and non-traditional resource users within the traditional land use area to ensure conformance with the intent of the plan.
9. The boundaries of the land use areas designated in the Cochrane Land Use Plan must be amended to accommodate the traditional land use area.
10. Within the traditional land use area, a moratorium must be placed on the signing of agreements, granting of permits, issuing of licences and other such activities pending the formulation of a joint planning board for the area.

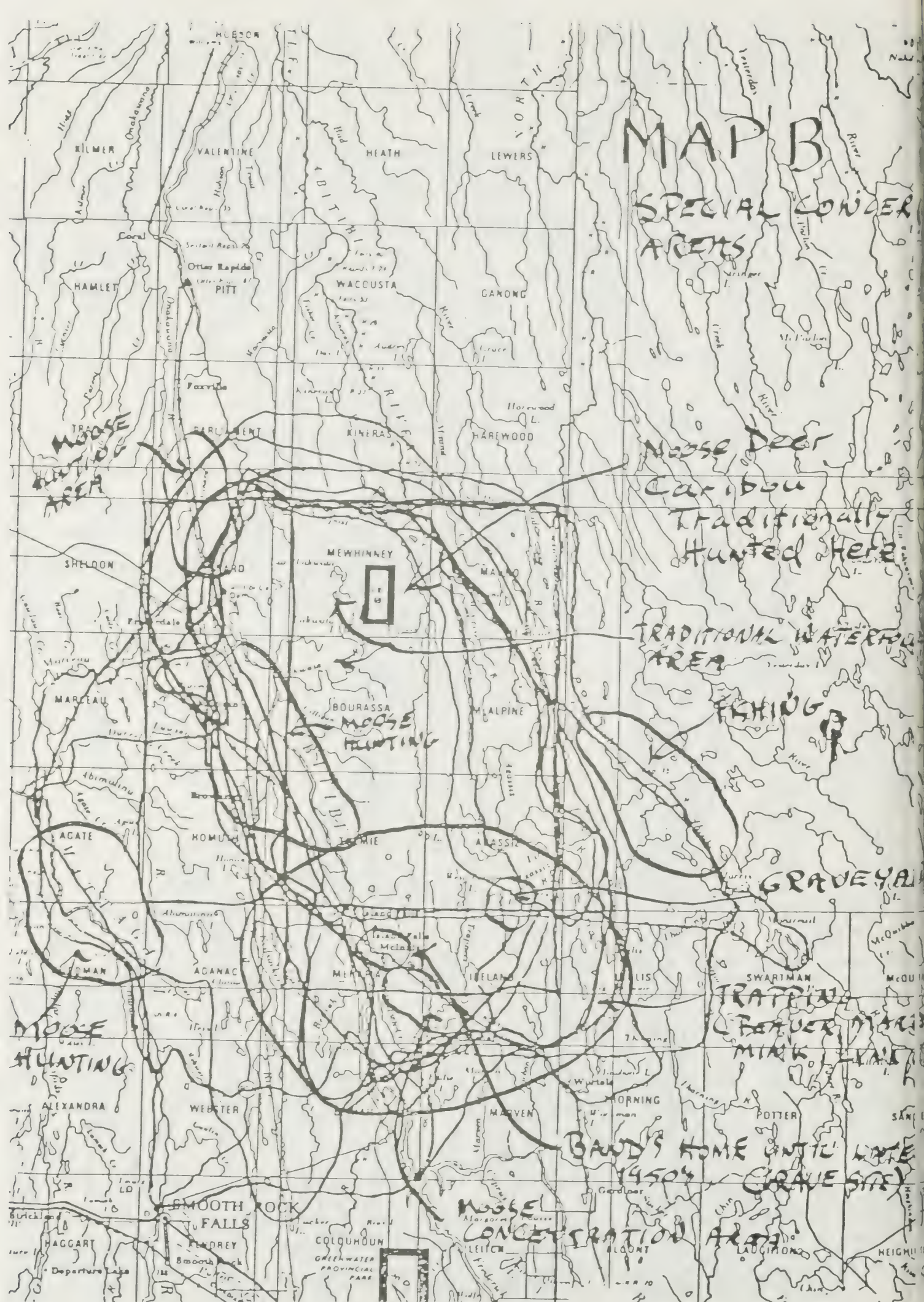
11. Such guidelines, criteria and restrictions as are now applicable to land use activities within the area must be considered interim pending the development of specific statements for the traditional land use area.
12. Whereas it has been stated by the membership of the New Post Band that while the Band wishes to preserve traditional values and rights to certain natural resources, it is also the goal of the Band that present and future generations more fully participate in the general economy; therefore it is recommended that an economic development strategy be developed to enhance the economic participation of the New Post people and other Indian people in the Cochrane area.

EACH BLACK LINE  
REPRESENTS ARE  
DEFINE BY BAND  
MEMBER





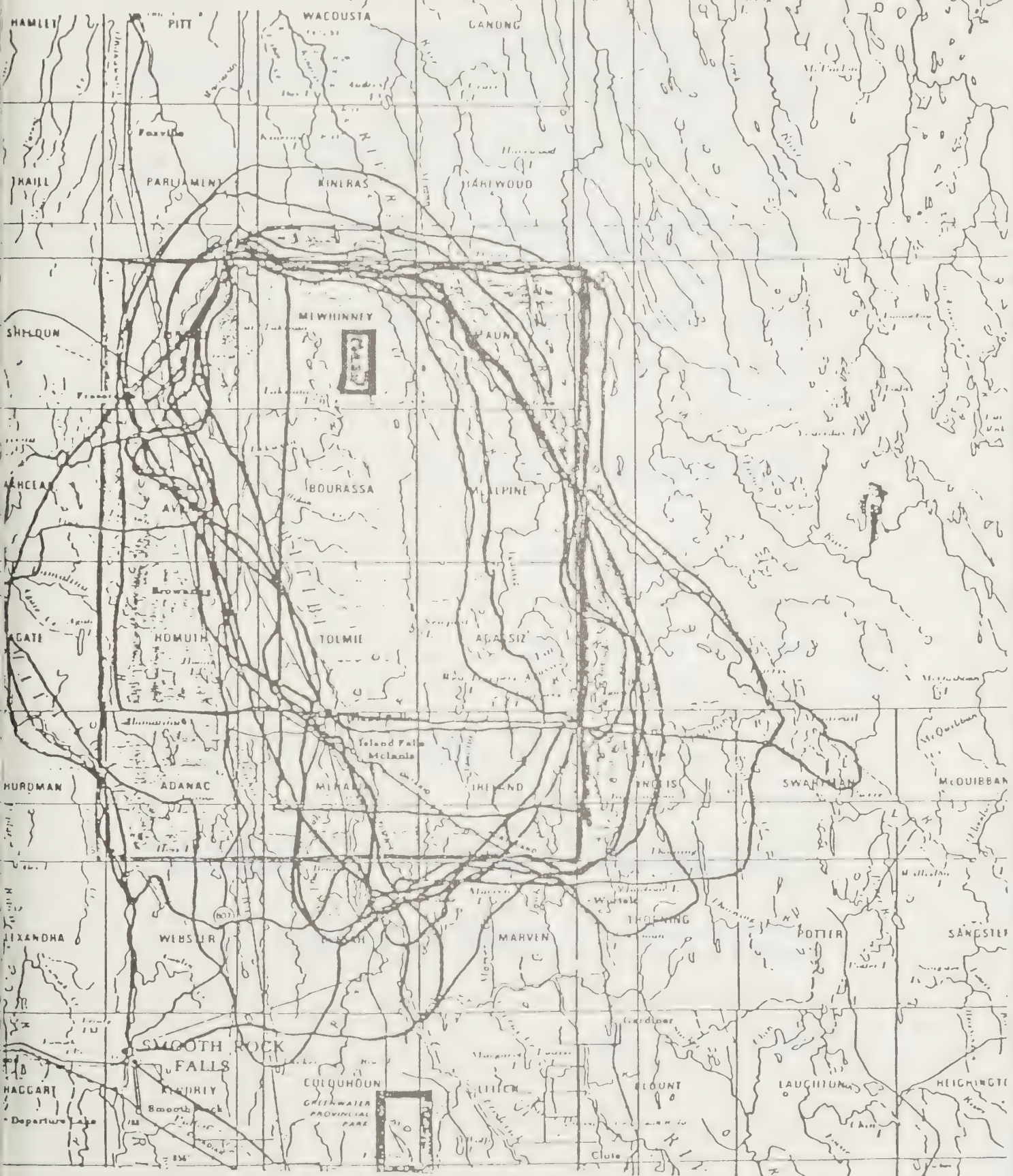
HUGE  
Along our Coast  
CONCENTRATION  
LEIGH BLOUNT





TRADITIONAL  
LANDS OF NEW POST  
AND AS DEFINED  
BY PRESENT MEMBERS

MAP C



#### FOOTNOTES

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5. Agreement between the Dominion of Canada and the Province of Ontario, July 3, 1905;
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SOME SOCIAL, POLITICAL AND ENVIRONMENTAL  
IMPLICATIONS OF LARGE WATER DEVELOPMENT SCHEMES  
WITH  
ALTERNATIVE POLICY SUGGESTIONS  
FOR  
NORTHERN ONTARIO

A BRIEF PREPARED FOR THE  
ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT



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## INTRODUCTION

Most of us can, and do take water for granted. As might be expected, the approach to water by government is to take the required action to ensure that supplies meet growing demands for population and industrial expansion. Little or no attention is paid to how individual action fits into the total picture.

The study and research we have been able to do suggests that taking water for granted may be one of the biggest mistake that North America has made. It is becoming increasingly evident that water and energy are intricately linked in the profoundest kind of way; ways that have implications for every important economic building block upon which our society is based. Most of the dams, major diversions, and other water development schemes have been completed within the last half century. We are beginning to see the results of possibly too much water development, done too quickly, with insufficient regard for the future.

The purpose of this paper is two-fold. We attempt to suggest the economic, political, social and environmental consequences that large water diversion schemes might have on the north, and to make recommendation

This paper also attempts to present alternative routes to development in the North, should massive water schemes not be considered desirable.

A point should also be made, before we begin, that in no way is our paper designed to be antagonistic toward Southern Ontario, the rest of Canada, or the United States. Rather, our thesis attempts to suggest alternatives to present dangerous trends in North American water development; alternatives which we feel are particularly applicable to the North because of its fairly extensive and largely unspoiled water supply. We feel that our perspective might also have relevance for other parts of North America. Within the limits of our time constraints, we feel we have barely been able to scratch the surface of an extremely complex subject. Because of its importance to the North, time and resources should be found for a comprehensive treatment of the entire northern water question.

## WATER RESOURCES NORTH OF 50° 1.

### Height of Land

The height of land in Northern Ontario stretches in a zig-zag line east and west from the Quebec border on the east to almost the Ontario-Manitoba border on the west. For about half of its distance this line wiggles its way along or close to the 48° parallel. Near Lake Superior it veers north of Lake Nipigon, crosses the 50<sup>th</sup> parallel for a distance toward the western border of the Province before swinging south to Canada's border with the U.S. The western extremity of the Province and all lands north of this line drain into the Arctic (or north flowing) watershed. (See Appendix 1, Plate 1.)

Nowhere is the height of land more than 1,200 feet high. For most of its distance 500 feet represents the realistic height which must be overcome to divert the bulk of some drainage basins south. Even an elevation of 1,200 feet does not represent an engineering problem of major proportion in a scheme to direct water over it. The height of land, therefore, is a natural barrier to the southward flow of water, whose deterrent to diversion is only relative to the commitment to divert water over it.

### Drainage Basins

Five major rivers drain the Arctic Watershed of Northern Ontario. These are the Severn, Winisk, Attawapiskat, Albany, and Moose. The land mass thus drained approximates 461,500 sq. km. (154,500 sq. mi.) or about 96% of the total Northern Ontario land mass. The mean discharge of these rivers amounts to 4,900 cubic meters per second (173,200 cubic feet per second). This water flow roughly translates to 387 billion litres per day. One other way in which this flow might be expressed is in acre feet. The combined flow of the five Northern rivers approximates 5.32 acre feet per second.

Of the five rivers, four of the five have been considered for diversion south or for power development. The exception is the Moose. The location of Moosonee at the estuary plus the already extensive hydro development on the river and its tributaries may in part provide reasons why the Moose has been excluded.

1. From Sewell, W.R.D. and Foster, H.D. - Table 2



### Drainage Basins (cont'd)

Since the land mass which would be drained constitutes 96% of Northern Ontario, if the Royal Commission on Northern Environment advocates diversion of the five rivers, no other land use considerations would have relevance.

The second largest of the five rivers which drain this region is the Moose (Drainage: 41,900 sq. mi. versus 51,700). Much of its drainage basin lies between the height of land and the 50<sup>th</sup> parallel. The Royal Commission on the Northern Environment is commissioned to concern itself with matters which lie north of 50°. To thus limit itself to this boundary when considering water schemes, would not, in our view, make much sense. Whatever happens to the Arctic Watershed between the height of land and 50° will have absolute implications north of 50°. Therefore as far as policy planning of water for the North is concerned, Ontario must include the entire Arctic Watershed from points of origin.

In 1982 the total daily withdrawal of water for Northern Ontario is calculated at approximately 700 million litres per day! When compared to the total daily flow of nearly 400 billion litres per day, it is easy to conclude that if availability was the only criteria to consider, selection of Northern Ontario waters for diversion would be very tempting indeed!!.

### Importance Based on Relative Size

The combined drainage area of the five Northern Ontario rivers ranks sixth of 25 in size of all major drainage areas, or groupings of drainage areas which flow into the Arctic Ocean and the Hudson Bay. In addition the combined drainage area ranks 9 of 40 major drainage areas or groupings of drainage areas for the whole of Canada.

In terms of water flow only one other river which empties into the Arctic or Hudson Bay exceed the combined flow of these five rivers. This is the MacKenzie River. The combined flow of Northern Ontario's five rivers represents 13.5% of the total flow into Hudson Bay and 8.8% of the total flow into the Arctic Ocean and Hudson Bay combined.

### Conclusion and Recommendations

The size of this Northern Ontario water resource is significant. The disposition of water will determine the future north of 50 for all time. Its importance is all the more significant, when one recognizes that the bulk of this resource is poised, within easy reach of the Great Lakes, just on the other side of the height of Land.

The area drained by the five major rivers of Northern Ontario does not all lie north of 50°. What happens between the height of Land and 50° will influence what can happen north of that line. Therefore it is recommended that:

Recommendation 1. AS REGARDS WATER AND WATER MANAGEMENT POLICY THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT NOT BE RESTRICTED TO CONSIDERING ISSUES WHICH LIE NORTH OF 50°, BUT INCLUDE ANY WATER RELATED ISSUE WHICH LIES WITHIN NORTHERN ONTARIO AND THE ARCTIC WATERSHED FROM POINT OF ORIGIN.

## THE IMPORTANCE OF THE NORTH IN ESTABLISHING WATER POLICY

### Implications of a Policy Gap

Sixty percent (60%) of Canadian water flows north into the Arctic or Hudson's Bay. Canada has no coherent national water policy. Jurisdiction over water is shared between the Federal Government and the Provinces. Provinces are free in most instances to operate unilaterally and they do. Ottawa and the Provinces have no cohesive set of agreed upon guidelines or parameters within which water is managed and within which development takes place.

As will be seen elsewhere in this paper the growing water crisis in the U.S. will eventually lead to pressure on Canada for water export. At that time it will be imperative for Canada to have a national water policy within which to frame a response.

In Ontario the only major water available for diversion south into the Great Lakes to replace water "exported" are the four river systems mentioned previously. The area drained by these rivers comprise most of the area north of 50.

Furthermore, most of the water mismanagement situations which have led to U.S. water problems are shared by the heavily populated areas of Southern Ontario. The diversion of water to solve U.S. problems would therefore benefit Southern Ontario as well as the U.S. Under these circumstances it is likely that the decision would be to divert Northern waters south, since the centres of population and decision making reside with governments situated in Southern Ontario (Ottawa and Toronto).

### The Great Lakes - A Potential Need for Water

The situation is compounded by the fact that the Boundary Treaty of 1914 stipulates that both countries shall share equally the waters of the Great Lakes. This part of the treaty has been interpreted by some U.S. negotiators as meaning that each side has access to half of the waters. The question then becomes who gets which half? Could the U.S., for example, in a desperate effort to ameliorate chronic water problems pump the Lakes half dry and still be within their rights as far as the

### The Great Lakes - A Potential Need for Water (cont'd)

Treaty is concerned? Some think so, and while there is little likelihood that this could or would ever happen, even a drop of a few feet in Lake levels would have devastating effects on installations and developments on both the North and South shores of the Lakes. Canada's greatest assurance that this will never happen lies with the cities and towns that border the lakes within the U.S. If however, the decision is made by the U.S. Federal Government that some parts of the U.S. must have Great Lakes waters, whatever the inconvenience to lakeshore cities, then lake levels could drop within the limitation of the Boundary Treaty. The Ontario Government will then be faced with solving the problem of decreasing lake levels on its side of the border. It will be very difficult for Ontario to avoid a decision not to divert Northern waters, south.

It is unlikely that the more drastic aspects of the foregoing scenarios will ever occur. What is possible and likely, however, as the U.S. water situation continues to deteriorate is that the U.S. can put great, but very subtle pressure on Ontario for the diversion of Northern waters. By simply extracting from the Lakes an amount equal to the amount that could be replaced through diversion, Ontario would be obliged to maintain water levels at whatever critical threshold they established as being needed to ensure the viability of Ontario Lake-front communities.

To some extent this eventuality looms ever increasingly on the horizon as the State of Iowa, not a Great Lake State, embarks on a project to access Great Lake waters through either Illinois or Wisconsin.

### The Effects of Water Transfers

It will probably surprise readers to note that as a whole Canada has engaged in more water diversion schemes than has the U.S. The North therefore is made even more vulnerable by the already established propensity to solve water problems by yet another diversion.

The social, and environmental cost/benefits of water diversions will be discussed elsewhere in this paper. The net result however of diversions is that the area from which the water is diverted bears all of the social and environmental costs and reaps very few, if any, of the benefits.



## The Effects of Water Transfers (cont'd)

As will be seen, diversions can not be part of the North's economic future. However, the greatest hurdle which will have to be overcome in securing the North's future is first and foremost, to successfully resist what is likely to become increasing pressure to divert its waters, south. This can best, and possibly only, be done through the active endorsement by the North of sound water management policies which reflect:

- a) the environmental realities which are unique to Northern climates, and
- b) the determination to establish an environmentally viable economy in the North, that is not just based on the extraction of non-renewables, or the harvesting of slow-to-regenerate forests.

As regards the North, we concur with Bocking's statement:

"Canada has an opportunity to re-create a nation that values the natural integrity of its land and water and lives in harmony with them. Such a nation will possess an identity unique on this continent, which will enhance greatly its possibilities for independent survival."

## Conclusion and Recommendations

Through a comprehensive water management policy, the North can provide the leadership needed to resist pressure to divert Northern waters south while at the same time ensuring that the mistakes made through mismanagement of this precious resource in heavily populated and industrialized portions of the continent are not repeated in the North. Therefore it is recommended that:

Recommendation 2.     AN ECOLOGY BASED WATER MANAGEMENT POLICY BE ESTABLISHED FOR NORTHERN ONTARIO.

Recommendation 3.     WATER MANAGEMENT POLICIES REFLECT THE ENVIRONMENTAL REALITIES WHICH ARE UNIQUE TO NORTHERN CLIMATES, AND

Recommendation 4.     WATER MANAGEMENT POLICY REFLECTS A DETERMINATION TO ESTABLISH A VIABLE ECONOMY IN THE NORTH, THAT IS NOT JUST BASED ON THE EXTRACTION OF NON-RENEWABLES, OR THE HARVESTING OF SLOW-TO-REGENERATE FORESTS.

## THE IMPENDING NORTH AMERICAN WATER CRISIS

### A Crisis of Quality or Quantity

We discuss in this section, mainly the causes of the crisis as evidenced in the U.S. This is in part due to the fact that:

- a) the intensity of the problem is most severe in the U.S.
- b) the problems are transportable to anywhere in North America where there is heavy population and industrialization.
- c) it is from the U.S. that the pressure to divert Canadian waters will come.

It seems to be a generally accepted conclusion by any whose works we have been able to review, that North America is facing a water crisis. It is not as generally accepted that North America is facing a water shortage. In the opinion of many, we are only facing a water shortage to the extent that rapid industrialization of the U.S. and parts of Canada in the last 50 years has resulted in loss of water quality.

As Dr. Gilbert E. Whyte of the University of Colorado has put it:

"There is no shortage of water in the U.S. that is seriously impeding the economic growth of the country ..... There are problems of quality of water, of deterioration of water, but not of quantity."

Foster and Sewell\*, highly respected geographers from the University of Victoria, have indicated that while the total reliable water flow of Canadian rivers exceeds that of U.S. rivers, the total annual flow of all rivers in both countries is not significantly different to substantiate the generally held and inaccurate belief that the U.S. has the need and Canada has the supply.

"The United States, like Canada, has enormous water resources. Based upon total average flows of United States rivers, the volume is only slightly lower than that available to Canada (Table 3-1)."

\* No known relative.

A Crisis of Quality or Quantity (cont'd)

"TABLE 3-1"

Fresh-Water Supplies and Uses, United States and Canada

1975 (Billions of Litres per day)

	UNITED STATES	CANADA
<u>Supplies</u>		
Total river flows	8,138	8,706
Contiguous mainland flows	4,656	7,986
Contiguous mainland "reliable" flows (9 years in 10)	2,839	5,564
<u>Uses</u>		
Total withdrawals	1,279	76
Total consumption	401	11
Estimated in-stream requirements	3,917	N/A

What is of great significance is that a number of experts in the U.S. suggest that the country is nearing the limit of its economic growth potential based on existing water and energy resources. To continue to expand industrially new supplies of water must be found. As the late Senator Frank Moss has said,

"Increasingly, the control of water becomes the key to prosperity, growth and political and economic power in the United States."

Based on this kind of reality, a body of opinion exists which argues that imported water supplies can never be totally depended upon, and that therefore to base continued industrial expansion on insecure supplies would leave the nation vulnerable. They advocate that the solution for the immediate future is improving water quality of existing supplies.

The crisis can be attributed to several factors in our Society.

1. Political Inadequacy when Dealing with Pollution Control

Improving water quality is politically very difficult to achieve. For example, after 20 years of control measures, the majority of recommendations from the International Joint Commission for improving water quality of the Great Lakes remain to be achieved to the

1. Political Inadequacy when Dealing with Pollution Control (cont'd)

levels advocated.

Some of the strongest lobbies against control are from the worst polluters and mis-users. They still advocate successfully for a continuation of the traditional solution to water "shortage" problems in the U.S. whatever their cause; the diversion of water from an area of presently unused supply to the locale experiencing the water problem. Up until 1980, it has been possible to supply this solution internally within U.S. borders. The limit however has been reached, and the continent is now faced with the problem of whether the U.S. has the political will to clean up its supply, or whether they will take the alternate route of finding the means directly, and as has been seen in a previous section of indirectly extracting supplies from Canada.

In the opinion of Sewell:

"Regardless of which (of these) projections proves to be correct, it is clear that the demand for water in the U.S. will continue to grow. This expansion can be mitigated by a variety of conservation strategies; or, as has been typical, attempts can be made to meet it through large-scale water diversions."

In terms of clean up versus diversion the situation of the water supply problems faced by the City of New York appears to provide the classic example. New York City wastes more water each day than the City of London, England uses each day. We have, then, the classic example of water mis-use. New York City lies at the mouth of one of the major rivers in the U.S., the Hudson, whose annual water flow is also one of the most reliable. However, the Hudson has been polluted beyond use as a supply of fresh water for domestic consumption as well as for most industrial purposes. Rather than force upstream polluters to clean up (political solution), the State of New York took Pennsylvania to the U.S. Supreme Court to divert for the City of New York a sufficient supply from the latter states upstream water supply. This example also serves to illustrate that within present realities, solutions to water quality problems are politically impractical while other alternative solutions



1. Political Inadequacy when Dealing with Population Control (cont'd)

exist; such as the legal authority to divert water from your neighbour, when such authority can be obtained.

In terms of size, relative to some water problems and their solution, the New York City problem is a micro-example. N.A.W.A.P.A. (North American Water and Power Alliance) is the macro-example of this traditional diversion approach to the solution of water problems. Since the sovereignty of two nations is at stake in this application of a solution to water supply problems, it is to be hoped that common sense will prevail, and that instead, the political-will will be found in the U.S. to force the exploiters, wasters, polluters and mis-users to clean up so that the economy of the U.S. can continue to thrive within existing resources.

2. Problem of Need to Grow or Expand

While it is being suggested that the solution to present supply requirements is improved quality, and that this should take place before any consideration is given to further diversions, the same can not be said for the expansion of energy needs.

As will be developed in the next section water is at the root of energy production. Available sources of energy are essential to maintain or expand an industrial economic base. Huge amounts of water are needed to ensure a large expansion of the energy base.

As has been previously suggested, some U.S. experts indicate that their country may have reached the limits of its industrial growth, based on the energy that existing water supplies can provide.

North American economic policy can be characterized by the growth ethic; i.e. to maintain health and viability, it must continue to grow. For example, if the G.N.P. ceases to grow, the economy is said to be in decline. Solutions to energy needs to fuel this increasing growth are either:

2. Problem of Need to Grow or Expand (cont'd)

1. new, non-water dependant sources of energy (unpriorized at this time),
2. the infusion of millions of acre feet into existing supplies, to flush out the system while providing the water needs for the production of additional energy, (from where, becomes the key question), or,
3. the replacement of many of the present production methods which use water and energy as though there exists an unlimited supply, with ones which reflect the reality that there is a finite supply of both. For example, Richard C. Bocking in his book on water has suggested that one ton of finished steel can be produced using as little as 1,400 gallons of water or as much as 25,000 gallons, depending on whether modern methods are employed; one pound of synthetic rubber, with 13 gallons or 300 gallons; one pound of aluminum with 1.24 gallons or 36 gallons; one gallon of crude oil for 1.73 gallons or 44.5 gallons, etc.

The implications of this latter solution to increased energy needs with which to allow for continued expansion of the U.S. economy is the massive re-orientation of North American thinking from one of a consumer oriented society to that of a conserver society. It becomes increasingly difficult to envision this transition taking place within a stable, non-threatening change process when one considers that the United States got an edge on many of the World economies, particularly, the post 2nd World War European economy, through its ability to behave as though water and energy were in unlimited supply. One has to be concerned with the ability of the U.S. to adopt a conserver approach on a magnitude of sufficient scale to avoid a water crisis, while realizing that out of absolute necessity, many of the European production processes which were once competitively hampered by the need to conserve expensive energy resources, would now enjoy a competitive edge in the type of re-oriented American industrial economy suggested by the solution.

### 3. Inappropriate Land Use

One example may serve to illustrate some of the complexities in the water shortage/quality/supply and demand crisis. West of the hundredth meridian, a line approximately bisecting the Dakotas and extending to Laredo, Texas - nearly all the land below 8,000 feet is too dry for unirrigated agriculture. West of the Rockies, it becomes a desert. Despite this, a huge agricultural industry has developed based on large irrigation schemes made possible by massive diversion problems. As Barnett states:

"The reality remains that the richest agricultural land and some of the fastest growing populated centres in the U.S. that resulted are located in a desert."

Since the region lacks rainfall, it is conversely blessed with abundant sunshine and high temperatures. Water made available through irrigation completes the provision of those essential elements needed to produce a thriving agricultural industry. In this form agriculture is a total consumer of water. After irrigational use the small amounts of water which are returned to the water system from which they were extracted are so burdened with salts leached from the soils through which they have passed that they are useless to potential downstream consumers. The deterioration of water through this type of use has led to the "once only" concept of water utilization, a concept at odds with the popular belief that water is capable of repeated use as it moves downstream.

The water used in irrigation schemes is for the most part transported many miles in open ditches which are unlined. Water is wasted through evaporation and seepage.

Environmentally inappropriate crops are grown on irrigated lands. For example, Arizona is a net exporter of alfalfa, a crop which normally requires an environment where rainfall exceeds evaporation. It can only grow if supported by huge amounts of water. Similarly only 3% of the hay crop produced in this state is used locally. The rest is exported out of state. This crop is produced on irrigated land, with water denied to the City of Pheonix. To supply Pheonix,



### 3. Inappropriate Land Use (cont'd)

the State has had to obtain Congressional approval for a major water diversion scheme from the already overcommitted Colorado River.

A further example of the production of environmentally inappropriate crops is the story of cotton. Since competition from the growth of a better strain of cotton in Egypt, plus declining demand resulting from the development of synthetics, threatened the cotton industry in the U.S., cotton has been supported by federal subsidy. As a subsidized crop, cotton provides secure income for the producer. Cotton grown on irrigated land represents assured income from an assured crop. Incredibly in the dry Southwest, land was irrigated to produce this crop, despite the fact that the crop produced on naturally watered land was already producing more than enough to meet both the national and export market demands. Crops grown on naturally watered lands can not compete with those produced on irrigated lands for quality and yield. Annual production on naturally watered lands is subject to the vagaries of rainfall and weather. As has been mentioned crops grown on irrigated lands have a much higher guarantee of yield. With this assurance those producing crops on naturally watered lands can not compete.

The result has been that by 1980 over 50 million acres of naturally watered lands in the U.S. have been taken out of production, while at the same time encouraging the inappropriate use of irrigated lands.

### 4. The Inappropriateness of Subsidizing Water Costs

The situation has been further compounded by the economics of the situation. As one economics authority has put it, "Water is cheaper than dirt". At a time when soil could be obtained for \$10 a ton, water cost \$0.05 a ton. If anything, the inflation in water costs have not kept pace with those of soil. Translated, this means that the irrigation farmers paid between \$5 to \$10 per acre foot. Having to pay beyond this price, it was claimed, put the profitability of irrigation farming at risk. At the same time the net cost of water



4. The Inappropriateness of Subsidizing Water Costs (cont'd)

transfers was calculated at \$65.00 for the same acre foot.

Enormous subsidies were being paid to one segment of the U.S. farming community for crop production which in some cases was already subsidized (cotton), giving them a tremendous unfair and inappropriate advantage. As small farmer after small farmer could not compete and dropped out, the irrigation farmer was encouraged to take up the slack and to grow bigger. Agrobusiness has taken over the typical irrigation farm situation.

Water diversion schemes are typically subsidized water projects since no one is expected to pay the real cost of the diversion. It is very easy to understand the economic and social consequences which result from subsidized diversion schemes when it is recognized that the cost of a diversion is borne at the point of origin of the diversion. (That is where the dam is built.) The profit from the diversion is enjoyed at the point of termination of the diversion (where the industry is located). The waters are transferred but the costs are not. Although he may continue to make a profit from the water diverted to him, the recipient can not afford to pay, or is not expected to pay the real cost of bringing the water to him. From the point of view of business practice, any unit of the operation which can not or does not pay for the goods or services received represents a net loss to the operation.

We have then, the situation where irrigated agriculture using subsidized water ties up valuable dollars in a net loss industry, while naturally watered land in other parts of the Continent lies fallow.

Canada should not consider the export of water while this situation is allowed to persist.

5. Waste of Resources

By definition, agrobusiness is well organized and influential.

Through its lobby and its ability to finance the campaign to re-elect

5. Waste of Resources (cont'd)

politicians at every level, it influences those aspects of the political system which might be expected to correct the situation. The growth ethic is no more foreign to agrobusiness than it is to any other large enterprise. There continues therefore to be a constant demand for water to increase the acreage of irrigated lands in this artificially maintained situation. For example, in 1909, 8,000 acres were under irrigation; by 1949, 2 1/2 million; by 1965, 14 million acres.

The results of subsidized water and energy is the encouragement of energy wasting technologies. Piping water to irrigation projects to cut evaporation would only increase the real cost as would lining irrigation canals to cut seepage. The users would continue only to afford the subsidized cost per acre foot in order to maintain their economic viability, resulting in an even greater differential between real and subsidized costs. Thus, open unlined ditches continue to be used, and waste of the subsidized product is encouraged!

Cheap energy is and always was, a North American myth. It translates into subsidized water projects at public expense. It has encouraged the deployment of technologies and wasteful economic practices which are highly energy and water consumptive. These water projects have subsidized metropolitan growth and industrialization by means of artificially cheap energy and water. They have contributed to the homogenizing of North American society through the concentration of people in large Urban centres.

A number of lessons can be learnt from this uneconomic and wasteful practice. Bocking suggests:

"The solution to the 'maldistribution' of water is, not transportation, but relocation of economic activity. If this presents some technological problems let the engineer devote his attention to the solution of these, rather than the technicality of the dam needed to divert these waters elsewhere."

## 5. Waste of Resources (cont'd)

"There is a need to use waters where they are with a minimum of disturbance to the natural system, its location and its direction of flow."

"... without supplying for the expansion of irrigated agriculture there could be no possible reason for moving water anywhere in North America."

## 6. Causes of North American Water Crisis

In the foregoing, an attempt has been made to describe the nature of the pending water crisis and some of the complexities. The causes of the North American water crisis can be summarized under the following headings.

### 6.1 Over Use:

Declining water tables in arid areas caused by people locating where they want to live rather than where the source of supply exists. Example:

In 1945, there were 2,000 deep wells in South Plains of West Texas.

By 1965, the demand on water had increased to 30,000 deep wells in South Plains of West Texas.

Result: Declining water table at the rate of 8 feet per year.

### 6.2 Decline in Quality caused by:

6.2.1 rapid industrialization resulting in indiscriminate disposal of huge amounts of waste products in the water supply. Example:

65 different classes of industrial wastes in Canada, 26 of which fall into the worst category, "difficult to treat".

6.2.2 growth of the chemical industry and the use of chemical technology in almost every economic pursuit. 4 million chemical compounds have been developed and registered.

6. Causes of North American Water Crisis (cont'd)

32,000 are in commercial use. 2,400 may be causing cancer in the work place.

6.2.3 leeching into the water supply of toxic chemicals deposited in land fill projects. (Love Canal)

6.2.4 deposition by large chemical companies of dangerous toxins into the underground aquifer by means of high pressure technology as a system of disposal, and the leeching of these deposits into the underground water supply.

6.2.5 rapid growth of population centres and the deposition of municipal waste into water supply. Although, according to Sewell, "by far the worst polluter in terms of its impact on the oxygen content of water is the pulp and paper industry which uses 53% of the nation's total B.O.D. (biological oxygen demand) loadings," municipalities also use a lot of oxygen in degradable waste. This oxygen is needed to break down pollutants. To some extent, this oxygen demand can be alleviated by secondary sewage treatment systems, which remove 85 - 90% of total oxygen demand of sewage. However, as noted in the next point, we then may be faced with some undesirable side-effects as a result.

6.2.6 the synergistically created water pollutants from chemicals already in the water, those deposited through waste disposal, or those used in the treatment of waste. (For detail see: "Five Environmental Considerations")

6.2.7 the overuse and misuse of chemical fertilizations and pesticides in agriculture and the leeching of these into the water supply. Example:

45,000 registered pesticide formulae, 800 million pounds



## 6. Causes of North American Water Crisis (cont'd)

of which were used. This amount had increased to 400 million tons in 1980.

Between 25 - 50 million tons of fertilizer have been used each year.

### 6.2.8 thermal pollution of water from industrial plants, and nuclear installations. Example:

"The largest single water use in Canada is thermal power production, which requires water for cooling purposes. Some 48% of water withdrawals in this country are for such cooling."

### 6.2.9 acid rain caused mainly by SO<sub>2</sub> and NO<sub>2</sub> emissions from smelters and fossil fueled power plants to produce electricity.

## 6.3 The Myth of Super Abundance:

Huge water projects develop surplus. Surplus is sold off cheaply. Populations tend to gravitate to these locales to take advantage of the cheap resource. A deficit situation develops and thus the need for even bigger projects. The real cost of water management projects are never passed on to the consumer, who is thus encouraged to waste the resource and to develop wasteful technologies.

## 6.4 Conflict between Users:

Example: The "once only" rule, governing water use continues to defy multiple use water planners, the result is increased pressure to divert water to meet needs.

## 6.5 Circular Resource Chain:

Losses and inefficiencies caused by the wasteful process of converting water to energy and using energy to move water. See next section for amplification of this concept.

## 6. Causes of North American Water Crisis (cont'd)

### 6.6 Distorted Cost Factors:

Include not only the cost of clean-up, but the real cost of water management projects versus the subsidized costs leading to the sinking of huge amounts of much needed development capital into net loss water management projects which include dams, diversions and water transportation projects.

### 6.7 Diversion as a solution to water shortages created by declining water quality:

The crisis inherent to diverting more water to areas experiencing shortages due to declining water quality is not only that flushing the system is only a temporary solution unless abatement practices are introduced. Introducing both abatement and diversion into the system as a means of providing a quality water resource introduces exponential cost factor into the provision of water at the centre of need, a cost which is beyond the means of most economic systems to bear.

Further, diversion of water to the locus of need in order to overcome shortages due to declining water quality, without a parallel and vigorous program of abatement activity, would so overburden the environment with pollutants as to cause massive ecological collapse regionally.

### 6.8 Artificially Maintained Centres:

The diversion of still more water to centres of population and economic activity which are already maintained beyond local resources of water and energy ultimately serves only to increase their crisis potential while reducing their problem minimally, and temporarily.

## Conclusions and Recommendations:

The North American water crisis is pervasive. Because of current waste disposal practices, all heavily populated areas are affected. The problems are complex and solutions are not readily forthcoming. Permanent

Conclusions and Recommendations:

solutions imply major re-direction in thinking and orientation.

The traditional approach to water "shortages", real or apparent, has been water transfers from areas of currently unused supply.

Under present circumstances, continued advocacy of water transfers is indicative of a policy of avoidance. It has become absolutely essential that abatement procedures be universally applied and that the economy readjusts to the energy limits from available water resources.

It is strongly suggested that the long term effects of water transfers, unaccompanied by parallel abatement initiatives, rather than solving water crises could precipitate disastrous consequences both economically and ecologically in the Regions to which the water is transferred.

Therefore, it is recommended that:

Recommendation 5. ANY POLICY ESTABLISHED AS REGARDS WATER MANAGEMENT IN THE NORTHERN ONTARIO ARCTIC WATERSHED PRECLUDE THE TRANSFER OF DIVERSION OF WATER RESOURCES AS AN OPTION IN MEETING EXTRA-REGIONAL SUPPLY AND DEMAND DISCREPANCIES.

## CIRCULAR WATER/ENERGY RESOURCE CHAIN

A most important concept needs to be understood and acknowledged in the north, if we are to establish any meaningful water policy. This is what some policy advisors refer to as the Circular Resource Chain (CRC).

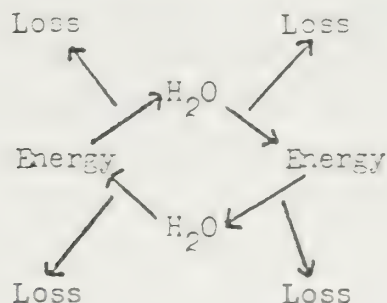
If one thinks about it for a moment, the process involved in the production of energy requires the use of huge amounts of water. This is true whether it involves the extraction of fossil fuels, the production of electricity, or of any other energy source. However, there is also a problem of finding and transporting water itself in order to use it for the production of the energy, and this involves a heavy energy drain. Significant water and energy costs arise if an area possesses huge deposits of oil, for instance, but there is no readily available water supply for the extraction process.

The extracting of resources, (because of the mining process itself), requires the consumption or use of water in varying quantities depending on the resource to be extracted, how easily it can be recovered, and the availability of water. As well, the cost of producing a unit of energy rises exponentially over time, with production (i.e. As the resource becomes depleted, it becomes less and less efficient, in both water and energy terms, to extract.). Not only the mining of uranium requires consumption of water, but also mining of all fossil fuels. The Syncrude tar sands plant for example, needs 86 m. litres of  $H_2O$ /day for processing - the average daily consumption of a city the size of St. Catharines, Ontario. The proposed Cold Lake heavy oil project could use 180 m. L/day, and if the talked about ten (10) tar sands plants plus two (2) heavy oil production plants go into operation by the year 2,000, we are talking about heavy water use indeed. This is all in a province - Alberta - which has 24 of the population at present and only 34 of the stream flow.

In schematic terms, the CRC resembles a closed loop. As is illustrated, there are significant energy and water losses each time one resource is used to produce or provide the other.



## Circular Water/Energy Resource Chain (cont'd)



Where water must be transported over large distances, net energy and water deficit (or loss) situations occur; that is, instances where it takes one or more units of energy and/or water to produce one unit of either. In California, for example, more energy is expended in moving water from northern California to the south - in the operation of pumping plants, canals and irrigation networks - than is generated by the dams that store the water.

### Electrical Energy Source

Although water is always used in the production of energy, there is one form of energy which is more consumptive of water than any other. That is energy in the form of electricity production. \*

According to comparative studies presented at the U.N. Conference on Long-term Energy Resources, electricity production is the least efficient form of energy production there is.

"The most efficient source (of energy) is natural gas (which can be used directly) for heat; liquid or solid fuels used for the same purpose are somewhat less efficient. The efficiency of producing electricity ..... is significantly lower than direct use of the fuels considered. This reflects the very large Second Law (of Thermodynamics) inefficiency which is inherent in the conversion of heat energy into mechanical work. As a result, only about one third of the energy represented by the power plant's fuel is recovered as electricity."

In terms of both capital and energy consumption therefore, electrical generation is the least efficient source of energy there is. When we acknowledge the circular water/energy resource chain concept, it can be seen that the inefficient production and use of energy also

\* Thermal power production uses 48% of water withdrawals in Canada for cooling purposes alone.

### Electrical Energy Source (cont'd)

means the inefficient use of water. There is a very significant inefficiency of water use in electrical generation as compared to energy produced for direct use. Here is how it works. Take as examples, a fossil fuel (oil) which can be used directly, and uranium which must be converted to electricity to be used as energy. Both oil and uranium must be extracted from the earth, and both use in the process significant amounts of water. (As already explained, the amount varies with the difficulty of extraction). Both oil and uranium must then be transmitted, oil via a pipeline and uranium via rail. Oil requires approximately one Btu of energy to transport 87,000 Btus of energy one mile via pipeline, and uranium needs one Btu of energy to transport 37,000 Btus one mile via rail.

The difference in energy consumption so far is not significant, but here we come to the important factors. Oil can now be used as energy, but uranium must still be converted to electricity.

It has been estimated that one 600,000 Kw CANDU reactor plant uses more water than the total municipal consumption in all of Canada's western provinces combined. This water consumption includes the necessary reactor and cooling processes connected with the plant. This is not all. Besides the water needed in the mining process for uranium and that used in the CANDU plant itself, massive amounts of energy are used in the transportation of energy via power line to the consumer. Added to the transport of uranium by rail, one Btu of energy is used to transmit only 3,400 Btus per mile when transmitting energy via power line.

Taken in total, electrical energy is one third as efficient in water and energy use as are direct energy sources.

### Direct Energy Source

It should be noted here that since the production of electricity is the most inefficient in energy and water, any form of energy, if it can be used directly, is wasted if converted to electricity. This is true whether we are speaking of the fossil fuels such as oil, or

### Direct Energy Source (cont'd)

renewables such as solar. Solar is a perfect example. Centralization of energy production necessitates conversion of solar energy to electricity for transmission purposes. This is a far less efficient use of solar energy than if small individual units were utilizing the sun directly. Another consideration besides efficiency should not be ignored here. Degradation of the environment which accrues from large-scale solar collectors does not occur with small-scale direct individual use.

### Appropriate End Uses for Energy:

The efficient use of energy depends on coupling the work requiring task with a source of energy which is in a form appropriate to the task. For example, it is wasteful to use electricity for heat, since electricity is a high quality source of energy. Direct sources of fuel are more efficient in water and energy consumption, and ultimately less environmentally degrading.

### Size as a Factor:

There is a tendency in this country to develop large energy projects which are extremely wasteful. For example, the James Bay project was built in Quebec with an eye on selling surplus power to the U.S. Similarly, Ontario's Darlington nuclear plant is "dedicated" for export to the U.S.

It has been shown that Ontario has been over-producing electricity by about 20%, due it is said to over-forecasting of electrical needs since 1974. (A recent news program set this over-production figure at 25%.) Yet plans for expansion of Darlington, Bruce & Pickering plants continue, which will create an even greater percentage of over-production. This will force Ontario to scramble for customers, not only locally, but further afield (and as has been mentioned, will create an even greater diseconomy of scale). Since electricity, once produced, cannot be stored, it is therefore wasted if not sold. This creates pressure to sell electricity cheaply, and explains why the cost to consumers at the present time is competitive with direct energy prices, a condition which economically is not a true representation of the facts.



### Size as a Factor (cont'd)

(As demand comes more into balance with supply, and uranium, a non-renewable resource, is depleted, costs of uranium extraction will go up drastically.)

While over-forecasting of energy needs may be one factor causing this over supply, another cause is our tendency to produce electricity on a massive scale, rather than as it is needed.

When power is produced by a few very large power plants rather than more numerous small ones, it is impossible to achieve a close match between capacity and demand. If small projects are initiated, overall supply and demand rise with time in a smooth, continuous way, or if desired, can remain constant. If production is based on a few very large plants, capacity changes occur in large increments, and for a time, the system has much more electrical capacity than it needs. As a consequence a diseconomy of scale occurs where supply greatly exceeds demand. In that period, capital, energy and vast quantities of water are completely wasted. This is what has occurred in Ontario.

### Conclusions and Recommendations:

There is a substantial consumption and loss in the water/energy cycle every time one is used to provide the other. Therefore, exportation of energy is also indirectly exportation of water.

It is therefore recommended that:

Recommendation 6. THE PRESENT PRACTICE OF PRODUCING ENERGY FOR EXPORT WHILE PROFITABLE TO THE LICENSED EXPORTER IS A NET LOSS INDUSTRY FOR THE NATION, AND THEREFORE SHOULD NOT FEATURE IN THE WATER POLICY OF THE NORTH.

Recommendation 7. WHEN FORMULATING POLICY, WATER AND ENERGY SHOULD BE CONSIDERED <sup>TOGETHER</sup> SINCE THE PROMOTION OF ONE CAN HAVE SUCH EXTREME IMPACT ON THE OTHER.



Conclusions and Recommendations (cont'd)

- Recommendation 8. DIRECT ENERGY SOURCES MUST BE DEVELOPED AND UTILIZED WHENEVER POSSIBLE.
- Recommendation 9. MORE EFFICIENT AND APPROPRIATE END USES FOR ENERGY MUST BE DEVELOPED.
- Recommendation 10. ELECTRICITY IS A HIGH QUALITY EXPENSIVE RESOURCE AND MUST BE RESERVED FOR SPECIALIZED USE.
- Recommendation 11. IN VIEW OF THE FACT THAT, AS WATER IS USED OR CONSUMED, ITS QUALITY DETERIORATES RAPIDLY, SMALL ENERGY PRODUCTION UNITS ARE RECOMMENDED OVER MASSIVE, WATER CONSUMING, ENERGY WASTING AND ENVIRONMENT DEGRADING SCALES OF PRODUCTION.
- Recommendation 12. DECENTRALIZATION OF PRODUCTION WHICH PROVIDES LOCAL ENERGY NEEDS, ON A SCALE AS NEEDED, SUSTAINABLE BY THE WATER WHICH IS AVAILABLE AND BY THE IMMEDIATE ENVIRONMENTAL CAPABILITIES, MUST FEATURE AS A CORNERSTONE OF NORTHERN WATER RESOURCE AND ENERGY MANAGEMENT POLICY.
- Recommendation 13. DIVERSE ENERGY SOURCES SHOULD BE ENCOURAGED IN FORMS APPROPRIATE TO THE AREA IN WHICH THEY ARE DEVELOPED.

## POLITICAL CONSIDERATION INHERENT IN WATER DEVELOPMENT

Prior to embarking on a discussion of political considerations, it would be valuable to introduce first the constraints to political action which inhibit appropriate preventive and corrective measures from being taken.

Several political constraints prevent appropriate action where environmental management is concerned, four of which prevent adequate policy making after pollution has occurred, and three which inhibit political action before water quality is impaired:

The Preventive Constraints (prior to observed need for policy) are:

1. Conflicting goals (i.e. among local inhabitants in developing areas, priorities may conflict. Some may favor any type of development in order to grow, and others wish to protect the environment).
2. Institutional weaknesses in the systems of control and prevention. e.g., where licensing, prevention, and control bodies are carried out by the same people or institutions, conflicts of interest occur; or when it has not been made clear what the institutional priorities are or which priority takes precedence, confusion occurs.
3. The potential for creating new hazards through remedial actions are unknown, and not adequately investigated beforehand.  
e.g. Sewage treatments causing production of unknown compounds.  
(See Environment Section)

The Corrective Constraints (after the fact) are:

1. Lack of sufficient knowledge about the linking of cause and effect; (e.g. Synergistic and antagonistic effects) (See Environment Section)

### The Corrective Constraints (cont'd)

2. Unwillingness to give up the benefits which are enjoyed from the source of pollution; (i.e. once in place, it is politically unpopular to apply controls or to shut down an industry).
3. Policy makers may have a limited capacity to react; (e.g. there may be public antagonism to controls where large industries employ significant numbers of employees).
4. The divergence between perceived (visible) and actual risks. (See Lag Time Effects - Environmental Section).

### Institutional Weaknesses:

#### a) Antagonistic Policies:

Ontario has concern for and policies which reflect its major priorities. These policies are intended to protect the environment, strengthen the northern economy, be energy self-sufficient and conserve energy. However, if they do not incorporate an understanding of their interrelatedness, these policies may result in contradiction or even in the failure to fulfill Ontario's goals.

A good example of contradiction has already been illustrated in the conflict between water and energy policies. Another is that at the same time as we are over-producing electrical energy, we are calling for conservation of energy because of resource depletion and danger to the environment.

Yet another conflict would occur if Ontario should make a decision to divert water on a massive scale for water and energy export. In taking this step, Ontario would have made, to some degree, a decision to forego any ability it might ever have to be food independent. The reason for this is that since the most productive lands lie in river valleys, the flooding of them to build dams for water diversion schemes removes that land from production forever, thus decreasing our agricultural capabilities.

a) Antagonistic Policies (cont'd)

The problem lies in the fact that the diversion scheme has been considered in isolation, and in so doing, has been acted upon on the basis of certain value judgements. These value judgements are based on the principle of "growth at whatever cost". However, they ignore the presence of another value which has gained societal importance, a value which is implicit in Ontario's environmental policies. Ecological health has become of major importance to large segments of the society, and can no longer be simply put aside with the pretence that a quality environment is simply another consumer demand for more goods and services.

b) Control of Resources

It is an accepted view of policy advisors that control of fundamental resources is the key to political autonomy. For this reason, maintaining control over water resources is very important for the political and economic future of the north, particularly when located on a continent where the most valuable life resource has been so overused and misused.

Loss of control over water resources is not the only political implication of diversion water management schemes. Another key to political survival is control over the systems of distribution through which the resource flows. That is, whoever has possession of the system which distributes the resource also has some control over the decisions made in the region through which the water flows. Consequently, if major amounts of Northern water are "dedicated" to either Southern Ontario or the U.S., decisions about the economic future of the north will have to reflect the degree of this commitment made to others, resulting in reduced options for the north. The use of the water which has been committed elsewhere will be made by others.

The new 'owners' of the resource and the system of distribution, will make future decisions about water use, and hence, development



b) Control of Resources (cont'd)

in the north. The "dedicated" water is committed for all time and thus a significant proportion of northern economic, environmental, social and political options are lost.

It has already been suggested that water can only be used once. Therefore, if enormous amounts of water are diverted to increase the supply and dilute already polluted water in the Great Lakes, it cannot also be used for development in the north. If Northern development is a priority of the Ontario government, water diversion is a counter-productive action in this goal.

Large Scale Water Development Projects

Greater thought must be given to the long-term environmental consequences of large scale water development projects which are used for the purposes of increasing energy capacity, in order to generate more industrial development in already over-developed areas. It is already recognized that we are over-producing energy to an uneconomic degree, and that, in any case, severe environmental and social degradation accrues from extensive water development.

Therefore, if Ontario is to place any true emphasis on careful development, the policy emphasis must be based on the development of small, indigenous energy sources as they are needed. This would prevent huge, over-production of energy, as well as prevent the need to export excess energy.

If goals of environmentally sound development are to take place, energy export must be curtailed. There are three implications to energy export. One is that a false impression of unlimited fresh water is created. This leads to over use. The second assumes a capacity for the environment to renew itself which does not in fact exist i.e. it assumes a capacity to dispose of pollution which accrues from extensive water and energy development. The third implication is an assumption, whether recognized or not, that the development of the north is

## Large Scale Water Development Projects (cont'd)

no longer an Ontario priority. Export of large amounts of water and energy implies that the areas receiving the resources are thus provided with the means to develop further to the detriment of the area from which the water was diverted. Thus diverting large amounts of water or exporting energy from the North, to Southern Ontario and the U.S., encourages growth there, but not in the North. Not only is a diversion policy indicative of negative growth potential in the north (typical of boom and bust development), but the patterns of growth in the south will be perpetuated. These are already proving detrimental to the social, environmental and economic health in Southern Ontario and the U.S.

## Definition of the Majority

One reason which might justify diversion is that the north is not heavily populated, so water and energy should be brought to where people are. That is, dislocate a few people for the benefit of the majority. How valid is this argument? With the increasing number of dams and diversions taking place, a substantial number of people have been dislocated along the systems. Just who is referred to by the "majority"? If all the communities along the water system are disrupted, the majority is not being considered in that area. Is it a reference to the more densely populated areas of southern Ontario? Possibly not. If the diverted waters are used to produce energy, which is then exported to the U.S., perhaps it is for the majority south of the border. When the argument is presented in this way, it could be claimed that the relatively few people of Canada are dispensable when weighed against the 220 million Americans. Does anyone, American or Canadian, really feel that Canadians have a duty to endanger or sell their ecological birthright because of sheer weight of numbers? We think not.

## Conclusions and Recommendations:

Ontario must sort out its political priorities. Does environmental health take precedence, or growth at whatever cost? We believe that massive ecological alteration in the form of water diversion has

## Conclusions and Recommendations (cont'd)

already been proven environmentally disastrous. The real costs, social, environmental, and in the end, political, are too high a price to pay for the dubious effectiveness of large diversion water schemes.

Serious political implications which must be recognized are:

- a) that large-scale projects imply centralized management and control to operate efficiently;
- b) that centralized management implies diminishment of local control which could be sensitive to local needs and perspectives. Political decision-making capabilities and responsibility at the local level therefore depends on the dimensions of the project.

Because of all these political and environmental factors, we recommend that:

1. Indigenous energy sources on a small to medium scale be investigated, in order to encourage local initiatives.
2. Such projects be evaluated on the basis of environmental appropriateness to the area, water availability, and capacity of the environment to cope with subsequent pollution.
3. Export of both water and energy be discouraged not only to prevent extensive environmental degradation, but also in order to encourage positive development in the area rather than in the area of relocation.

Recommendation 14. BOTH WATER RESOURCES AND SYSTEMS OF DISTRIBUTION SHOULD REMAIN IN THE HANDS OF, AND BE THE RESPONSIBILITY OF, THE PEOPLE IN THE AREA IN WHICH THE NATURAL ECOLOGICAL SYSTEM EXISTS.

With the exception of number 14, recommendations from this section are incorporated with those of other sections of this paper.

## FIVE ENVIRONMENTAL CONSIDERATIONS

### 1. Lag Time Effects - Pollution & Control (PLT) (CLT)

From the time pollutants enter a system, there is a lag time before their effects are observable. Similarly, there is a lag period between control action which may be taken and results of these controls are observed. Both pollution and control lag time is, to a large extent, unknown, particularly in the north, where observation and experimentation have been virtually non-existent. Some idea of lag time periods have been studied in the case of the Great Lakes however. The International Joint Commission reports that in Lake Michigan, in spite of controls on production and use of dieldrins, dieldrin levels in bloater chubs in 1980 are twice the levels noted in 1978, and herring gull eggs are reported to be the highest in dieldrins in the Great Lakes Basin. In spite of efforts in the past twenty years, it is still unknown how long it will take to reduce pollution to the advocated levels. And some pollutants are more difficult to eradicate than others.

It is therefore important to recognize that due to pollution lag time effects (PLT effects) northern waters could become unmanageably polluted over time before any significant effects are noted. It is then too late to prevent dangerous pollution and degradation of northern environment.

Furthermore, not only is it difficult to assess and control known pollutants, but the Joint Commission is concerned about the

"relationships between these reported data and the myriad of chemical substances not monitored on a routine basis."

Only those chemicals already perceived to be enormous problems are monitored.



1. Lag Time Effects (cont'd)

Since, according to the International Joint Commission study (Art. II, Great Lakes Water Quality Agreement, 1978) -

"it is virtually impossible to adequately assess the synergistic (i.e. materials whose total effects may be greater than the sum of the effects taken independently) and antagonistic effects of ambient levels of combinations of chemicals known to occur in the Great Lakes System,"

it is therefore of the utmost importance to recognize the need to maintain the purity of northern waters. For when pollution effects are impossible to assess, corrective measures can only be inadequate at best.

It is important to note also that water treatment programs can cause their own problems, synergistically, with water purity. In Lake Erie, the presence of aromatic hydrocarbons was detected in all fish samples, and the IJC believes that -

"chlorination of sewage and waste waters at treatment plants along the river (St. Clair) contributed to the number of halogenated organic compounds observed."  
(Pg. 12 IJC Aug. 1982)\*

Seventeen organic compounds were detected in treated drinking water samples at Tilbury, Windsor and Amherstburg.

Another example is the detected presence of chloroform in New Orleans' drinking water, caused by the combination of chlorine with other materials which exist normally in the water.

\*Footnote:

Halogens are any of the five elements: fluorine, chlorine, bromine, iodine and astatine which exist in the free state normally as diatomic molecules, (They form part of Group VIIA of the periodic table.) and which can combine with other matter to form halogenated organic compounds. e.g. chloroform

1. Lag Time Effects (cont'd)

The north should attempt to limit the need for sewage or water treatment, since there appears to be an increased possibility of problems that arise from it. Treatment, therefore, is not a particularly viable or desirable substitute to fresh water resources. Any element which is added to a body of water affects that water's composition and can cause unexpected and frequently problematical chemical actions or reactions which possibly cannot be corrected.

Furthermore, if the assessment that the north does not have as much water and precipitation as appears from observation is correct,\* treatment with halogens to correct the growing perpetual addition of pollutants would have a compounding effect on the problem. Although it is being recognized that the effects of these additions to the water in the south is anything but desirable, there has been no analysis of such effects in an environment which cannot renew its own health at the same rate as in warmer climates.

Consequently, great care must be taken in the north that no substantial water treatment programs become necessary to maintain an adequate and healthy water supply. Resulting problems which may possibly be corrected in the Great Lakes would be irrevocable in the fragile environment of the north, or at the very least, extend the pollution clean up lag time to unimaginable time periods.

2. The Permanent Deleterious Effects of Dam Building:

In geological terms, a river has a life cycle. Any freshet, given enough time, will mature into a stream, then a river and finally a major flow which empties into the Ocean. The drainage basin of a freshet is understandably small. The drainage basin of the Albany River, for example, is 51,700 square miles. Thus, as a river matures, it organizes or systematizes younger rivers around it.

Dams are inevitably a part of water development projects and diversion schemes. A dam across a river arrests the natural aging process of that river. On the up stream side, a river takes on the characteristics of an old river, with slow moving currents, a heavy

\* See Environment Section - Real versus Plentiful Supplies in the North.

2. The Permanent Deleterious Effects of Dam Building (cont'd)

load of sediments and a delta-like effect in areas flooded as the river valley is flooded.

In the reservoir system, not only is the ecological system destroyed irrevocably in and around the area, but also unpredictable and unpredictable chemical reactions and leeching out occurs causing the undesirable presence of certain minerals. For example, mercury exists in soils naturally, but it is released in dangerous quantities into waters which have been flooded and become reservoirs. Thus, both pollution and salinity increase in artificial water systems as distances become greater.

Below the dam the maturing process does go on, but it is controlled within the limits fixed by the decreased rate of flow. Noone knows the effects of these limits over a 51,000 square mile drainage basin of a dammed river.

The biology of the river and its immediate surroundings undergoes extensive change. By using a dam to control a river, options are lost. How many noone really knows. But examples which have been studied such as the Bennett Dam in B.C. and the Nelson-Churchill diversion suggest there are many. Examples are: lost food producing options in the once productive and now flooded valleys; lost fishing, tourism, mining, lumbering, etc. It would seem reasonable to expect therefore that lost options should figure largely in decisions to build dams. No dam should be built until after a thorough investigation has been completed of the long range permanent alternatives that might be possible were the dam not built.

Water development projects to produce energy for technology are forever because the dam is forever. However, technological change is rapid and very often the water project from which the energy was developed to provide the technology is itself technologically obsolete. e.g. St. Lawrence Seaway, Welland Canal, etc. Not only do they become technologically obsolete, but they ultimately are unable to pay for themselves. Dams invariably are temporary in their usefulness;

2. The Permanent Deleterious Effects of Dam Building (cont'd)

the destruction they cause is permanent.

3. The Need for Environmental Assessments:

If the North wishes to preserve the integrity of its environment, and thus ensure for itself a thriving economy and optimistic future, it would be wise to ensure that development projects are thoroughly assessed environmentally before proceeding.

Until the Environmental Assessment Act became law only lip service had been paid to this concept. Every night as a new environmental crisis is reported on the evening news, mostly from the densely populated and highly industrialized areas, the cost of having ignored this advice is made increasingly clear. (It is still unknown how effective the EAA will be in establishing policy.)

The problem would appear to be that the field engineer, the design architect, the contractor, and the construction engineer are all part of a Team. Their roles are understood and the fruits of their labours are recognized. On the other hand, the environmentalist, biologist, zoologist operates alone, often finding themselves thrust into the role of being prophets, warning of doom and gloom. As we are learning every day, they have been ignored to our peril.

An example will serve. In watershed management, the biologist's recommendation centers on preserving the ability of the swamp to control water levels by soaking up excess water in times of abundance, so that it may be gradually released in times of drought. The engineering team's recommendation includes typical engineering solutions; i.e. backfilling the swamp to reclaim the land for development, and building a flood control dam.

Almost invariably, it is the flood control dam that gets built. But as we write this paper, recent floods throughout the Southern U.S. and California, prove once again what has been known for a long time; flood control dams work for some of the time, but not all of the time, whereas swamps have been controlling water levels for millenia.



3. The Need for Environmental Assessments (cont'd)

It is time we began paying very serious attention to what our biologists can tell us, and it should become an operating principle of the North that no development will proceed without full and thorough determination of the environmental impact. If this means delaying the project while techniques are developed to provide the essential data, then so-be-it. It would be absurd to contemplate building a dam without exhaustive analysis of all engineering aspects, regardless of how this analysis may delay construction. Why, then, is it any more absurd to suggest that equally exhaustive environmental analysis should precede development projects, particularly in the North where recovery in the environment is known to be much slower, and damage more permanent.

4. Real Versus Plentiful Supplies in the North:

The impression of plentiful water in the north may be misleading. Precipitation over much of the north is low, and the evaporation rate is slow. But because the perma-frost below prevents the water that accumulates from draining away the north gives a visual impression of plenty. The implication of this possibility is that northern water reserves are not as bountiful as surface observation would suggest. This of course implies in turn that the development of large water diversion schemes, even from a purely practical point of view, not only would deprive the north of its own waters, but also suggests that an abundant flow of water to the south could not continue into the future at the same rate as it began.

Consequently, after encouraging increased use in the receiver areas, water might slowly trickle to a fraction of its previous flow, not because of increased use or overuse in the north, but because the water is simply not available.

A question to be asked also is what is the likelihood of increased salinity inland in the Arctic region. The fresh water supply presently maintains the hydrostatic pressure, but if water is withdrawn this pressure decreases, possibly causing increased salinity inland. If this happened, what would be the implications for the permafrost

4. Real Versus Plentiful Supplies in the North (cont'd)

layer and the ecology in the region?

5. Air and Water Quality:

One of the very finest features of Northern Ontario is the quality of its air and water. These features make the north a desirable place in which to reside, and is one of the factors which determines their settlement here, for many people.

Air and water are resources common to us all. For the most part, they are taken for granted. We breathe air without thought. We use water as it is required.

However, regardless of the simplicity or complexity of the process, the air and water utilized is never returned to the environment in the same condition as it was, before it was used. To greater or lesser degree, the quality has been modified through usage. To some extent, the environment has a capacity to absorb, dilute, purify and rejuvenate both air and water through the biological systems that maintain a balanced ecosystem. In warm climates, the biological systems reach the upper limits of complexity. In these, the ecosystem reaches maximum ability to maintain stability. In colder climates, the variety of biological systems is greatly reduced. The ability of the ecosystem to maintain a balance is therefore drastically reduced. For example, in a steamy forest at sea level on the Equator, there are over 3,600 species of plants per 1/2 square mile. No count has yet been completed on the number of insects, or other organisms. At latitude 50<sup>0</sup>, there is probably not a 100 plant species with a corresponding reduction in insects, and other organisms.

Pollution is visible when the degradation to the air or water resource exceeds the capacity of the biological systems to maintain balance in the system.

As pollution increases and as more frequent environmental horror-stories assail us, it becomes increasingly clear that the biological systems of heavily populated and industrialized segments of North

5. Air and Water Quality (cont'd)

America have been overwhelmed. It is evident that air and water quality can no longer be taken for granted. The pattern, however, has been to use water as we see fit, without regard to its condition when we have finished with it.

The rapid industrialization of North America in the last 50 years coupled with this typical attitude towards air and water has led to the massive pollution problems we now face.

Waste products have historically been left to the environment to deal with, and present loadings have overwhelmed the environment's ability to cope.

We have in the North an opportunity not to repeat the mistakes made elsewhere. Success could be assured if strict standards of air and water quality were to be adopted, and applied against air and water emission from any kind of system which might adversely influence the environment.

Standards of air and water emission could well be based on the following principle:

Air and water which is returned to the environment after use must be of a sufficient quality that it does not add incrementally to the ecosystem's inability to maintain stability.

As has been mentioned, there is ample evidence which proves the difficulty of forcing polluters to clean up after the damage has been done.

There are always a thousand and one reasons why exceptions "should" be made. However, if the North does not want to repeat the disaster that characterizes most of the industrialized areas of the World, no exceptions can be allowed.

The technology exists to make possible, application of air and water quality standards for emissions in the North. Requiring

5. Air and Water Quality (cont'd)

a potential developer meet emission standards could cause a delay in bringing the development on stream while technologies are put in place. This is a small price to pay in terms of the benefits to be gained, and in terms of the long term damage thus avoided. Avoiding damage is one method of maintaining maximum options for environmental use and development.

Some potential developers who are considering the North as a place in which to establish themselves might complain that having to meet this requirement would result in prohibitive production costs. If such is the claim then air and water emission standards could serve as a line of separation between industries which should and should not establish in the North. Where production costs might be excessive because of the standards imposed, it is perhaps better for such an industry to establish elsewhere. As already mentioned, the northern environment's ability to recover from damage is limited. Where this is not the case, incentives should be made available to help the potential developer establish the technology to ensure air and water emission quality standards are implemented as a function of attracting development to the North.

Conclusions and Recommendations:

Of the numerous topics which might be included under the heading of "Environment", five were chosen as having particular significance from a policy perspective. The recommendations which grow out of these considerations are listed below:

Recommendation 15. IT IS OF THE UTMOST IMPORTANCE TO RECOGNIZE THE NEED TO MAINTAIN THE PURITY OF NORTHERN WATERS.

Recommendation 16. GREAT CARE MUST BE TAKEN THAT NO SUBSTANTIAL WATER TREATMENT PROGRAMS BECOME NECESSARY TO MAINTAIN AN ADEQUATE AND HEALTHY WATER SUPPLY.



Conclusions and Recommendations (cont'd)

- Recommendation 17. NO DAM SHOULD BE BUILT UNTIL A THOROUGH INVESTIGATION HAS BEEN COMPLETED OF THE LONG RANGE PERMANENT ALTERNATIVES THAT MIGHT BE POSSIBLE WERE THE DAM NOT BUILT.
- Recommendation 18. NO DEVELOPMENT PROCEED WITHOUT FULL AND THOROUGH DETERMINATIONS OF THE ENVIRONMENTAL IMPACT.
- Recommendation 19. AIR AND WATER EMISSION QUALITY STANDARDS APPROPRIATE TO THE NORTHERN ENVIRONMENT SHOULD BE APPLIED AND THESE STANDARDS SHOULD BE THE BASIS UPON WHICH ALL DEVELOPMENT TAKES PLACE.
- Recommendation 20. INCENTIVES IN TERMS OF FINANCIAL AND RESEARCH SUPPORT SHOULD BE PROVIDED TO ASSIST WOULD-BE DEVELOPERS WHO ARE CONSIDERING SETTLEMENT IN THE NORTH, SO THAT THE TECHNOLOGY CAN BE DEVELOPED TO MEET THE AIR AND WATER STANDARDS.

## RECOMMENDATIONS

The following provides a collated list of the recommendations extracted from the various sections of the study.

1. As regards water and water management policy the Royal Commission on the Northern Environment not be restricted to considering issues which lie north of 50<sup>0</sup>, but include any water related issue which lies within Northern Ontario and the Arctic watershed from point of origin.
2. An ecology based water management policy be established for Northern Ontario.
3. Water management policies reflect the environmental realities which are unique to northern climates.
4. Water management policy reflects a determination to establish a viable economy in the north, that is not just based on the extraction of non-renewables, or the harvesting of slow-to-regenerate forests.
5. Any policy established as regards water management in the Northern Ontario Arctic watershed preclude the transfer or diversion of water resources as an option in meeting extra-regional supply and demand discrepancies.
6. The present practice of producing energy for export while profitable to the licensed exporter is a net loss industry for the nation, and therefore should not feature in the water policy of the north.
7. When formulating policy, water and energy be considered as inseparable since the promotion of one can have such extreme impact on the other.
8. Direct energy sources must be developed and utilized whenever possible.

Recommendations (cont'd)

9. More efficient and appropriate end uses for energy must be developed.
10. Electricity is a high quality expensive resource and must be reserved for specialized use.
11. In view of the fact that, as water is used or consumed, its quality deteriorates rapidly, small energy production units are recommended over massive, water consuming, energy wasting and environment degrading scales of production.
12. Decentralization of production which provides local energy needs, on a scale as needed, sustainable by the water which is available and by the immediate environmental capabilities, must feature as a cornerstone of northern water resource and energy management policy.
13. Diverse energy sources should be encouraged in forms appropriate to the area in which they are developed.
14. Both water resources and systems of distribution should remain in the hands of and be the responsibility of the people in the area in which the natural ecological system exists.
15. It is of the utmost importance to recognize the need to maintain the purity of northern waters.
16. Great care must be taken that no substantial water treatment programs become necessary to maintain an adequate and healthy water supply.
17. No dam should be built until a thorough investigation has been completed of the long range permanent alternatives that might be possible were the dam not built.
18. No development proceed without full and thorough determinations of the environmental impact.

Recommendations (cont'd)

19. Air and water emission quality standards appropriate to the northern environment should be applied and these standards should be the basis upon which all development takes place.
20. Incentives in terms of financial and research support should be provided to assist would-be developers who are considering settlement in the north, so that the technology can be developed to meet the air and water standards.







500000: P.A. LEPKIN

THE FIVE MAJOR DRAINAGE REGIONS OF CANADA 1974

FIGURE 11. The five major drainage regions of Canada: (1) Atlantic; (2) Hudson Bay; (3) Arctic; (4) Pacific; (5) Gulf of Mexico (Mississippi).

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Vista - "Power Play" - Friday, Dec. 3/82 (9:00 - 10:00 p.m.)



Rec'd Jan. 19/83

HS  
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January 1983

The Commissioner  
The Royal Commission on Northern Development

Sir:

I was born, raised and am still living on the same property my father homesteaded in 1898 and have made more than 90% of my livelihood off that same property. I find that the closer we are to the grass roots, the more we work with Mother Nature and the soil; the more practical is our training and the more consideration and respect we have for our environment.

As far as land use is concerned I would be happy with Option 3, providing the following recommendations are put into effect at once:

- 1) Timber extraction or destruction should be ruled out within 300 feet (92 meters) of all lakes, rivers, streams and ponds that contain water all year.
- 2) Reforestation should take place during the first growing season after timber extraction.
- 3) All free, open camping and boat launching areas should be reserved for Ontario residents only. Our visitors should all have to camp in supervised camping areas only where daily fees are charged. I understand this is to be enforced in some areas in the future. I hope this covers Management Units No. 13, 21-A, 21-B, 33, 32, 34, 36, 11-B, 11-A, 12-B, 12-A, and all units that border the Trans Canada highway from Thunder Bay west to the Manitoba border.
- 4) To protect and improve our game and fish populations such as moose, deer and lake trout, close the seasons entirely in certain areas for a year or two until populations are again up to desired levels.
- 5) That some form of 'bounty' be reinstated on wolf and coyote hides obtained within (40 kilometers) 25 miles of farming areas to help increase our deer populations.
- 6) That information and feedback be obtained from local hunters, trappers and rural residents (the grass roots) before changes are made in seasons and licencing and this concensus be put into effect at once.

If more qualifications are desired on any aforementioned recommendations, I am available. Thank you.

Respectfully submitted,

Bert Stich

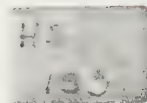
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# GERALDTON BOARD OF EDUCATION

Box 909  
Geraldton, Ontario  
P0T 1M0



nan R. Labranche  
Business Administrator  
Secretary-Treasurer

Phone (807) 854-1470

January 18, 1983.

Mr. E. Falgren,  
Chairman,  
Royal Commission on Northern Environment,  
215 Red River Road,  
Thunder Bay, Ontario,  
P7B 1A5

Dear Mr. Falgren:

The Geraldton Board of Education, at a regular meeting held on December 13, 1982, discussed and reviewed the brief and various documents submitted by Mr. A. Korkola, Principal of Geraldton Composite High School. Trustees were in full support of that submission submitted to you on November 3, 1982.

As a result, the attached submission was prepared and is being submitted for your consideration.

Yours very truly,

N. R. Labranche,  
Business Administrator.

NRL/gm  
Encl.

c.c. A. Korkola, Principal  
B. Rapley, Supervisory Services Officer



GERALDTON BOARD OF EDUCATION  
SUBMISSION TO ROYAL COMMISSION ON THE  
NORTHERN ENVIRONMENT

WHEREAS:

Forty-three per cent of the secondary students who start in grade 9 never finish grade 12 to receive a Secondary School Graduation Diploma,

WHEREAS:

This percentage of students who terminate their formal education must be at least equally high in Northern Ontario,

BE IT RESOLVED:

That the Commission strongly recommend to the Province that the Provincial educational system address this major problem with a sense of high priority so that these students would by the time they reach age 16 (the legal age of quitting school) have the following:

- a) a broad understanding of the major primary industry in their geographic area, eg. Forest Products Industry, Mining Industry, Agricultural Industry. This broad understanding to include
  - a historical perspective of the industry,
  - the economic significance of the industry,
  - some understanding of the private enterprise system,
  - an understanding of the role and responsibilities of the worker, unions, and Company management.
- b) a broad understanding of the life-long career opportunities in that industry; ie, unskilled, technical and professional,
- c) an understanding of some basic "life skills", such as the following:
  - personal financial planning and consumer awareness,
  - human relations skills necessary for successful living in the workplace and in the home,
  - physical and mental well-being attainment,
  - Canadian citizenship.
- d) some readiness in understanding and skills for entry into the local employment situation.



FURTHER BE IT RESOLVED:

That school systems be provided with the resources and authority within Provincial guidelines to adapt flexible programs suited to local industrial and student needs:

Reference: Ontario Ministry of Education, Secondary Education Review Project, 1981, Recommendations #52 and #53.

Namely;

Recommendation #52:

*That, where appropriate, "school-related packages" be designed to accommodate the educational and vocational goals of students in order to provide a practical incentive for them to continue their studies.*

Recommendation #53:

*That the Ministry of Education be prepared to approve on an experimental basis "community-related packages" that may be developed jointly by teachers and community personnel.*

FURTHER BE IT RESOLVED:

That new school programs addressing the high percentage of potential school drop-out's emphasize practical and applied learning modules. For example,

- a high percentage of the student's school studies be related to cooperative education, work experiences and field studies,
- provide flexible timetabling opportunities so students could gain as much as possible from actual on-site outdoor/in-plant learning,
- be related to Ontario Ministry of Education Linkage opportunities for continuing and recurrent education.

WHEREAS:

Geraldton Composite High School has played a leadership role in Ontario since 1977 in trying to develop such a program entitled, "Forest Products Industry Program" in cooperation with the following:

- Ontario Ministry of Education; Skills Branch, Toronto, and Regional Office, Thunder Bay,
- Faculties of Forestry of Sir Sandford Fleming, and Sault College,

- Geraldton Board of Education,
- Kimberly Clark of Canada,
- Ontario Ministry of Natural Resources, Geraldton District,
- Ontario Lumber Manufacturers' Association,
- Canadian Pulp and Paper Association,
- Ontario Forest Industries Association.

AND WHEREAS:

A Provincial Steering Committee has been struck representing government and private industry, and that is coordinated by the Ontario Ministry of Education Skills Division.

BE IT RESOLVED:

That this Steering Committee receive the necessary funding support from the government to,

- a) expedite the development of related curriculum for an innovative Forest Products Industry Program for secondary schools,
- b) provide support funding for selected pilot schools to field test and develop such curriculum,
- c) share through Ministry of Education curriculum guidelines and resource documents the related curriculum materials to all school systems in Ontario,
- d) promote the development of such courses in other areas of Ontario.

WHEREAS:

This concept has applicability to not only the Forest Products Industry in Northern Ontario, but also to Mining, Agriculture, Manufacturing and other industries in all of Ontario.

BE IT RESOLVED THAT:

On the success and experience of this proposed program and model that apprenticeship and linkage opportunities be further expanded and developed for pupils by the development of similar innovative and practical programs for other sectors of the Ontario economy and employment market.

...

SUMMARY:

If we can develop school programs that meet the immediate interests of these pupils and the initial needs of industry, we can then eventually prepare these pupils to be better prepared for participation in the Canadian economy. With enhanced life skills we could eventually expect the quality of life for everyone in a community to improve. In Northern Ontario the students who "drop-out" of school are frequently the ones who remain behind in the community as they have not in the past, had the technical skills to compete for jobs in large urban centers. A program that would make them more understanding of the role of the principal local employers, their potential role as workers in that industry and to be better prepared as individual citizens would be a major step in helping these students, their community and our Province.





ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

COMMISSIONER J.E.J. FAHLGREN  
AND OTHERS

Mr. Fahlgren and members of the Commission, I personally feel that this hearing is really unnecessary, and that the Government should have taken faster action on the needs designated by the earlier hearing in 1977, 78. However, I have been invited to present a Brief on behalf of the Elderly, of this area, regarding their needs.

I have represented the Ontario Government as a Senior Volunteer since that group was first started ten years ago. I therefore feel I have a good knowledge of the needs of this area.

In my Brief of 1977 I mentioned the needs in the following areas Health, Home Care, Nursing, Home Assistance and Maintenance, Transportation and Nursing Home Care.

HEALTH CARE

Health Care in small communities does not compare with Health Care in the cities of this Province. Although there has been some improvement since 1977. At that time we had only one overworked dentist, we now have two young dentists and care is adequate. We now have a visiting Optometrist, once a month he makes a call to Geraldton and gives service to clients.

Hearing aids are not available in Geraldton nor is adequate hearing care. Hearing loss means a trip to Thunder Bay for treatment and hearing aid purchase, repair or other service. The local Drug Store does carry a supply of hearing aid batteries.

Drugs are not all covered on the Privilege Card. I know that if a Doctor signs a Government Form special Drugs can be obtained without cost. However, I have yet to hear of any Doctor making the effort to sign that Special Government Form.

Travel to the city for Medical necessities is very expensive to those living on the pension and supplement. Some of the things Senior Citizens suggest are, free drugs for those on Spouses Benefits, Free eye glasses for prescription lens, a 50% discount on Hearing Aids and transportation to the city.

PAGE TWO.ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT.  
HOME CARE.

Home Care is now available in Geraldton and Longlac. As of November 12, 1982 there were 10 to 15 people under the Home Care Program .This has come a long way from 1977 ,but, there is still room for improvement,which I hope will come in time.

#### HOME ASSISTANCE AND MAINTAINANCE.

This area remains a problem. There are very few people available in smaller communities for maintainance of a home. It is very difficult to get any electrical work done . Yard work is also a problem especially during the summer months when he grass grows so well, and constantly need cutting. Snow shovelling during the winter is another problem. Some people would rather put up with many inconveniences rather than give up their home and move into an apartment.

I am aware of the Community Service Orders and have made use of them at times. However, some people are afraid to give this service a try.

#### ELDERLY PERSOSN CENTRES

I am aware of this designation for Senior Citizens Groups. Why is it so hard to get this designation? In Geraldton it took 2 solid years to have our designation approved. There are only two groups with Elderly Persons Centre designation east of Thunder Bay. I know others are now trying to get the Elderly Persons Designation because of the financial help it brings. I hope it does not take the other groups two years to get some financial assistance.

PAGE THREE ,ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT 83  
TRANSPORTATION

Transportation in smaller northern communities is a real problem. There is no public transportation ,yet people are expected to pick up their mail from the Post Office, while people in the cities have the privilege of home delivery of mail.

Elderly and handicapped people have a very difficult time getting around during the cold winter months, October to April. Taxi service is very expensive for those on fixed incomes, the Elderly in the cities enjoy subsidised transportation at a fraction of the cost of taxis in smaller communities.

Why is it that the Ontario Government subsidises the transportation of students to and from school at 80% of the cost yet they will only pay 50% of the cost for transportation of the Elderly? I checked this out with the District School Board and transportation of students is called extra ordinary costs. Now could we designate transportation of the Elderly in smaller communities as extra ordinary costs and get the higher grant?

Geraldton is very fortunate, we do have a small bus for transportation of the Elderly. ,t is only three trips a week. Twice to the Elderly Persons Centre for afternoon entertainment and one trip for grocery shopping. Those using the bus pay a users fee of 25 cents a trip or 50 cents for the return trip. The Pioneer Club in town are holding a bingo each saturday afternoon to raise money for the cost of the bus .

Not only is the transportation of people costly in the North but the transportation of the necessities of life is out of reason. Food, and fuel for heating homes and operating vehicles in the North are far higher than the rest of the Province.

Ontario wants to be known as The Province of Opportunity. That may be so in the South but it certainly isn't in the North.



HOMES FOR THE AGED  
EXTENDED CARE

Nursing Home Care is provided for the Elderly of this area by Thunder Bay District Homes for the Aged .There are two homes one in Thunder Bay City the other in Terrace Bay, both these homes are 175 miles from Geraldton.

It was back in the early 60s that the late Ben Pressman as Mayor of Geraldton tried to get a Home for the Aged in this area. The late Roy Barker donated land to Thunder Bay District Homes for the Aged so they would have a piece of property on which to build a home.

About a year ago now Northern Affairs made an announcement that there would be Extended Care made available through existing small hospitals throughout Northern Ontario. WE of this area are hoping that in the near future the announcement will be made to proceed with construction.

There is however, a probpem, many people feel that the 20 beds which are supposed to be allowed will not be sufficient to accomodate the Elderly People of this vast area, If this is a fact then there will still be many Elderly People have to leave family and familiar surroundings for care in other places.

In a survey done by Geraldton District Hospital in 1982. There are 4,703 people in the adjacent area over the age of 55. AS of November 1982 Geraldton District Hospital were serving from 10 to 15 people with Home Care on a regular basis. There are 10 people in Geraldton Distrsbt Hospital under extede d care now ,which is 50% of the proposed beds in the proposed addition to the hospital.

Ginger Ball  
Pioneer Club  
621 - 1st Street West  
GERALDTON, Ontario



<u>Senior Citizens</u>	<u>55-64</u>	<u>65+</u>	<u>Total</u>
- Greater Area	1,867	1,218	3,085
- Geraldton Service Area	606	544	1,150
- Adjacent Area	198	133	331

- .2 Using information from the Ministry of Northern Affairs, the Northern Ontario Directory (79/80) and the Municipal Directory (80), the following was gleaned for the Geraldton Service Area by communities.

<u>Location</u>	<u>55-64</u>	<u>65+</u>	<u>Total</u>
Geraldton	260	258	518
Beardmore	51	35	86
Longlac	95	60	155
Nakina	30	40	70
Aroland	11	15	26
Auden	8	5	13
Caramat	24	15	39
Geraldton North	4	3	7
Hillsport	7	4	11
Jellicoe	15	10	25
Little Longlac Townsite	6	4	10
Longlake Reserve 58	10	30	40
Longlake Reserve 77	5	15	20
MacDiarmid	23	14	37
MacLeod Townsite	10	6	16
Rocky Bay Reserve	17	11	28
Martin Falls (Ogoki)	11	7	18
Nakina Townsite	<u>19</u>	<u>12</u>	<u>31</u>
	606	544	1,150

The remainder of the Greater Area plus the Adjacent Area, there is a total Senior Population (55+) of 4,703.



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Received at Moosonee Stearing  
January 11, 1983

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DIOCESE CATHOLIQUE DE MOOSONEE  
C.P. 40

CATHOLIC DIOCESE OF MOOSONEE  
BOX 40

MOOSONEE, ONTARIO  
POL 1Y0

January 3, 1983

Commissioner J.E.J. Fahlgren,  
Royal Commission on Northern Environment,  
261, Third Avenue,  
Timmins, Ont. P4N 1E2

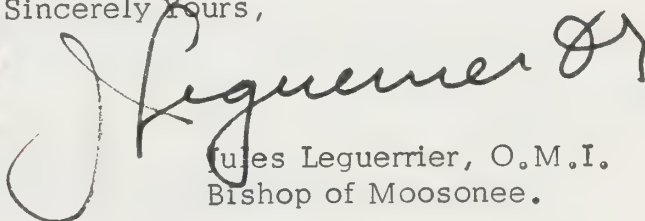
Dear Sir,

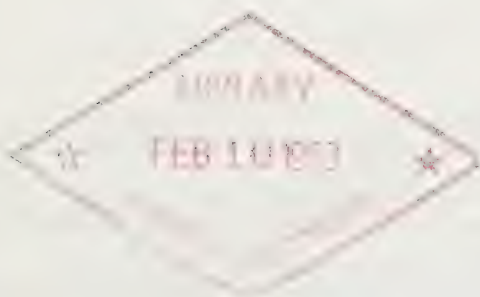
The high cost of living in Northern Ontario should be a concern for the Royal Commission on Northern Environment. In view of this I am sending you a note on a project that could be beneficial to three of those Northern Communities, namely Fort Albany, Kashechewan and Attawapiskat.

This is a proposal for the building of an electrical power line to connect those three Communities to the electrical grid of the Province. I do believe the project is feasible and would bring a big boom to the economy of those villages.

I do hope the Royal Commission will be able to do something to foster this plan,

Sincerely Yours,

  
Jules Leguerrier, O.M.I.  
Bishop of Moosonee.



## Notes

### On Electricity in the villages of the West Coast of James Bay.

#### Present Situation.

- 1- Ontario Hydro is operating the electrical power in the three Villages of Fort Albany, Kashechewan and Attawapiskat. For that purpose they operate two power Stations in Fort Albany and Attawapiskat.
- 2- The cost of operating those two Diesel- Powered Stations is running probably in the vicinity of one million per year, not including the capital~~s~~ costs of the Stations. This operating and maintenance cost is going up every year.
- 3- On account of the limited power of those Stations, the amount of electricity provided does not permit the use of electrical heating and the use of many electrical appliances.
- 4- The cost of producing electricity is astronomical and is at least ten times the cost of electricity in rural Ontario. Every year the cost is going up. This prohibits the initiative of the Villages to develop any business, due to the high cost of electricity and the high cost of fuel oil.

#### An Alternative

- 1-An alternative would be the building of a power line between Moosonee and Attawapiskat, a distance of about 180 Miles or 300 Kilometers, with two substations in Fort Albany and Attawapiskat. This would provide an



unlimited amount of electricity to be used in the three villages of Fort Albany, Kashechewan and Attawapiskat, not only for the lights, but also for the electrical heating. The fuel oil used presently on the Coast for light and heat must be well above two million litres per year, which has to be freighted every year with all the risks involved. Most of this oil would not be required. The Propane presently used in the cooking facilities of these villages could also be completely eliminated.

2- An unofficial quotation from a Utilities Contractors Company puts the cost of building such a line at around 28 million dollars. It would probably take two winters to be built.

3- The building of such a line would be a tremendous boom to those Northern Communities and would bring many economic and social benefits.

#### Propositions

1- That a feasibility study be done in the near future for the building of such a line.

2- That in the Winter 1983, the work would start with the building of the line, which could be operational in the Spring 1985, which would coincide with the opening of the new Hospitals to be operated by the James Bay General Hospital, in Fort Albany and Attawapiskat for the Ministry of Health of the province of Ontario.

3- That in the mean time the cost of electricity in those Communities on the Coast be reduced . The rates for electrical service should be the rates presently in force in the rural areas on Ontario. This policy is the policy in force in the province of Quebec and in the province of Manitoba, where diesel-powered Stations are operated .

### Conclusions

The result of a Study on the High Cost of living in Northern Ontario is expected in the near future. This item of the cost of electricity at the present time is one of the major causes of this high cost.

Such a project would require the cooperation of all the authorities concerned , provincial and federal Agencies .

Mr. C.F. (Clary ) Gatien , president of Powertel, Utilities Contractors Limited, would be available at any time to discuss the project. For that purpose, we include a copy of an informal quotation made by his Company on this project. As they are presently building the Power Line between Fraserdale and Detour Lake, south of Moosonee, They know what they are talking about.

Moosonee, Ont.  
December 30, 1982

Jules Leguerrier, O.M.I.  
Bishop of Moosonee.

# PowerTel

UTILITIES CONTRACTORS LIMITED

R.R. #1, Penage Road  
 Whitefish, Ontario  
 POM 3E0

December 7, 1982

Bishop of Moosonee

Subject: Moosonee - Attawapiskat Power Line

Gentlemen:

Per your discussions and information you requested, we offer the following rough estimates for the following items of construction in reference to permanent power for the Fort Albany and Attawapiskat area:

- |                                |            |                       |
|--------------------------------|------------|-----------------------|
| 1. Moosonee - Fort Albany,     | 115kV Line | Estimate 13.5 million |
| 2. Fort Albany,                | 115kV Sub. | Estimate 1.0 million  |
| 3. Fort Albany - Attawapiskat, | 115kV Line | Estimate 12.5 million |
| 4. Attawapiskat,               | 115kV Sub. | Estimate 1.0 million  |

The above cost estimates are based upon PowerTel's familiarity with labour, equipment and material costs in far north using 1982 base. On-site investigation of actual conditions which would be encountered has not been done.

In the above estimated cost, we have included items such as selection of route, line surveying, engineering and design, material procurement and expediting, Right-Of-Way clearing and construction.

The costs for environmental review and/or approvals and Right-Of-Way acquisition are not included.

If plans with this project are moving ahead, we suggest that a feasibility study and detailed cost estimate be formulated.

PowerTel would offer to under take this study for a budget cost in the neighbourhood of \$25,000.00. The study would take approximately 2 months to prepare.

If you have any questions or discussions regarding the above, please contact us at any time.





Received at 11.55am 13.1.82

January 13, 1982



LAND, RESOURCES & PEOPLE

NORTH OF THE 50th

A submission to the Royal Commission on the  
Northern Environment Hearings.

January 13/82  
Parish Hall  
Moose Factory, Ontario

Submitted by  
Norman F. Wesley



Mr. Commissioner, I realize that you have been in the area now for the last few days, and that you will probably be leaving within the next few days and if we haven't already done so, I would first like to extend to you and your staff a very warm welcome to the Moosonee-Moose Factory area.

Let me re-introduce myself. My name is Norm Wesley. I am a Canadian, an Ontarian and I am an Indian. I was born an Indian and I will always be an Indian, I was taught by my parents to be proud of who I am, to protect what is rightfully mine, and to mind my fellow man. As a child I attended school. I became an Ontarian, then a Canadian, but always first an Indian.

I have studied my past and the history of my people before and during the colonization of this country, and it is not a happy story. I feel that I know a little about Ontario, what is rightfully mine, and most importantly I know me.

Mr. Commissioner, I have not chosen to come to this hearing to play games with you as it appears some have and as others have been advised. I address you this evening because I am concerned about us as a people who live in the last and final frontier of this province - north of the 50th parallel.

I realize that your commission is to study and make recommendations to the Government of Ontario the impact of resource development in our backyards.... with hopes that, what we express will be the direction in which resource development will go in the North.

As Ontarians we have witnessed what resource development has done to our fellow man to the south, east and west of us. Our main concern is that we do not want history to repeat itself in our backyards.

Resource development we realize, has its benefits with proper planning. Planning that is done with us in mind, not for us, but through us ... two working hand in hand. We wish to be able to shape our own destiny. We are the ones that know what is best for us. We are the ones that must live here.

The current demands by the population of this province, and this country as a whole has left very few stones unturned in resource development to the south. What is left is here in our backyards. It is inevitable that it will be developed.

With that development will come jobs, probably not for us but for our children. Our children must be prepared for this and it is alternately important that you express to our government the importance of maintaining and to continue upgrading the quality and diversity of education in preparation for this time.

To express to our government that controls be established to enable us to shape our own destiny.

To control and maintain a sane society without stripping us of our once proud heritage.

To set controls to maintain the very social fabric of our families.

As an Indian, I question what is rightfully mine and what is rightfully yours. I question the extent, interpretation and the so called negotiation of the Treaty.

As an Indian before we can talk resource development we must talk about the very land in which these resources lie.

Was it not the intent of the Government to have the Indian give up claim to all lands in his possession?

Was it not the understanding of our people that this treaty was one of peace and friendship?

Look now as you travel the North. What peace do you see in our eyes. What friendship has been extended to us by society as a whole.

The question of land is a harsh reality and we cannot overlook reality within the framework of these hearings. As Indians only through formal hearings can we begin to resolve the question of land. Then the next step, to development of resources within that land.

I commend you on your stand to hold informal hearings to enable the every day citizen of the street to come in and address you on interest and concerns that they may have. Because without that Mr. Commissioner, how can you be reassured that the words of our leaders are the words of the people they represent.

I have expressed my concerns, I have no answers,  
but most importantly ,

I have a vested interest,

We must be heard,

because as each year passes we are becoming a silenced  
minority in our very homeland.



CH-20  
21  
-7N22  
FEB 10 1983  
Government  
Print  
Verbal presentation to the Royal Commission on the Northern Environment January 20/83. Welcome Commissioner Fahlgren and his staff to the Moose Capital city of Canada and of course to the milieu of French speaking Canadians in Ontario.

I would like to take this opportunity to thank you and your staff for allowing me to speak at the last moment type of thing, I have sent a copy of my talk via special delivery to Thunder Bay and I'm not aware at this time whether or not you have received it. I have given your staff extra copies.

I would like to point out to the people and to you Mr. Fahlgren that the staff working for you and the commission have shown exceptional dedication to their job and to the cause and when your mandate terminates at the end of March 31st, employers from the private sector as well as those from governments would be wise to steal them off you just in case your given an extension.

The main thrust of my talk is on MOOSE, I do not intend to elaborate or go into to much detail because I feel that much of the documentation on the subject has been circulated and has been forwarded to you and to the Hon. Leo Bernier.

My short talk is to convince you that your commission will see the light, the Northern light to recommend to the province that a feasibility study be carried out by the province of Ontario. Our support for such a recommendations comes in part from the laybelt economic conference held in Kapuskasing April 1980, the economic development seminar held in Hearst October 1981, from a Hearst council resolution 387-82, and from other citizens and groups. I'm sure as time goes on additional support will be found.

Our recommendation to the province is that a feasibility study be carried out by the province of Ontario concerning the viability of farming, domesticating, rearing, controlling of Moose with the purpose of selling or providing restaurants, tourist resorts, and any other suitable establishment Moose meat for human consumption in only those areas in Northern Ontario where Moose is known to proliferate.

This will provide a chance to other Ontario residents to consume Moose meat and to ensure that all residents in Ontario can have the opportunity to taste Moose meat when travelling or vacationing in Northern Ontario. This, I feel is one way of ensuring the existence of the moose, the wildlife heritage of Northern Ontario. It will also promote the tourist industry as the moose meat should and must be available only to the hospitality industry of Northern Ontario. At last something that we can keep to promote and in the industry in Northern Ontario.

Last but not least, it will provide employment opportunities for Northerners and expecially to the Indian people.

I must stress at this point and I will do so throughout my talk, that in no way was council's intentions or anyone else's intentions to compete with beef.

As stated in a letter from the Min of Agr & Food, the domestication of Moose is very labour intensive, a plus for us because labour is abundant and training would be minimal if any is required, as our Indian people are with it when it comes to dealing with wildlife. However in a time of constraint, the Min of Agriculture and Food feel that they must direct their resources towards the improvement of conventional livestock.

In Russia, the animals are reported to be used in farming operations for meat, milk, and working animal. I don't feel that it was or is it our intentions to go that route. However, the Russians have experimented for over 30 years with the domestication of moose and have achieved some measure of success, but it is difficult to assess accurately because Russian reports on the project are incomplete. According to the MNR, one of the three moose farms are in operations. My guess at this stage is that they tried to farm the animal in the traditional sense of the word and it has not worked. So for those in the beef industry, their fears of any competition from Moose meat can rest in peace because it could not compete with Russian beef. We all know that Russia is not into the tourist business, therefore we can conclude that moose meat as an attraction for tourist and as a job creation type of thing is not their bag.

Manitoba examined the feasibility of Moose farming in 1975. The idea was rejected on technical and economic grounds. Again it was farming in the traditional sense.

In New York State, the temporary State Commission on Tug Hill did an intensive study of the feasibility of farming moose in 1978. The conclusion of the consultants report was that the project was only marginally feasible from an economic stand point. Again, farming in the traditional sense of the word.

The province of Alta conducted a study of game farming. The results of the study indicated that economically game meat could not compete effectively with beef.

In BC they dropped a proposal for trial game farm, but because of the lukewarm approval from a public survey, they dropped the idea.

From what I can gather everyone that has looked into the possibilities of game farms, have always looked at farming of moose in the traditional sense, fencing, feeding inoculating etc. and I feel that that is where they missed the boat.

I have a lot of faith in my province, and the people in it, I am convinced that Ontario is the best equipped to tackle a feasibility study such as this one. We have the expertise and we are known throughout the world for our research capabilities. If moose and any other wildlife species for that matter can be domesticated and again not in the traditional sense of the word, the province and country that can do it is Canada, and more specifically Northern Ontario.

Who knows, the results may indicate that it is not feasible and yet it may indicate that it is feasible. My gut feeling is that it is feasible and it is because it is such a controversial subject that scares governments and commissions. After all it is only a feasibility study and it will create employment that is labour intensive... isn't that what it's all about. Regardless, whatever the feasibility studies show, if it's conducted honestly, which I have no doubt that it would be, the mere fact that Ontario conducted the study will indicate once and for all the truth.

Terminating Mr. Commissioner, I hope that you and your commission will shed that light, shed that Northern light and recommend to the government of this province to carry out this feasibility study. Thank you.

Robert Trahan





Received at Hearst Hearing  
January 20, 1983

HS  
158

Honourable Chairman, Ladies & Gentlemen,

First of all, I have to apologize for 2 reasons, for not submitting my presentation ahead of time, and secondly for presenting my submission in French. As most Northerners, I am quite busy and I did run out of time for translation.

Monsieur le President, Mesdames et Messieurs,

Je tiens tout d'abord, après les excuses que je viens de présenter, à remercier la Commission Royale sur l'environnement dans le Nord pour l'opportunité qui m'est offerte d'exposer nos vues dans la compétence et le mandat de votre commission.

Notre Municipalité, incorporée depuis le 1er Juillet 1975, comprend deux villages, Mattice et Val Côté, dans un territoire de 162 miles carrés, soit les deux cantons géographiques de Eilber et Devitt. Notre population compte 1200 personnes en très grande partie d'origine Canadienne Française. Malgré l'exode de nos gens, nous conservons une population très vigoureuse et très généreuse. D'ailleurs plusieurs personnalités illustres de la région sont venues au monde à Mattice.

Nous ne possédons aucune industrie, excepté le bien être social et le chômage, si ce n'est la station de compresseurs de la Compagnie Transcanada Pipe Lines. Cependant, nos deux localités sont des places où il fait bon vivre.

Nos deux localités ont la fonction de satellites aux villes de Hearst et de Kapuskasing, et constituent deux villages dortoirs. Nous offrons une population exceptionnelle grande valeur à l'industrie des sciages et à l'industrie des pâtes et papiers. Pour ce qui est du domaine de l'éducation, nous envoyons nos élèves du secondaire à Hearst, et pour ce qui est des services hospitaliers, c'est également la ville de Hearst qui reçoit nos malades, en attendant d'avoir notre propre hôpital et notre école secondaire.

Depuis l'incorporation de notre Municipalité, nous avons amélioré les services de voirie pour les quels nous sommes présentement auto-suffisants.

Nous avons un système de collecte d'ordures ménagères, deux dépotoirs, deux casernes de pompiers volontaires avec l'équipement moderne nécessaire pour la lutte contre les incendies. Nous avons amélioré les services d'eau potable dans le village de Mattice. Dans le domaine de la Récréation, nous avons construit et payé sans aucune dette, une arène de \$ 1,000,000.00 avec glace artificielle, pour hockey et Curling, un gymnase, et une salle communautaire. En 1983, notre système d'égouts collectifs pour le village de Mattice sera en opération, au coût de \$ 1,250,000.00.

Nous bénéficions aussi d'une unité administrative Municipale hors-pair. Nous avons également une bibliothèque Municipale de 15,000 volumes qui répond aux besoins de toute la population.

Nos gens sont exigeants, fiers, travailleurs et extrêmement hospitaliers et solidaires. Nous comptons différents clubs sociaux très actifs et prospères. D'ailleurs les activités de nos Carnavals Missinaibi comptent parmi les plus importantes dans le Nord de la province et ont une réputation universelle.

Nous avons également une résidence de 15 unités pour personnes âgées.

Maintenant, nous sommes prêts à recevoir et à desservir un développement résidentiel relativement important. Nous pourrions absorber, avec les structures en place, sans aucune diminution de services, 10 familles par année pour les 5 prochaines années, dans le village de Mattice. Nous sommes prêts à recevoir, avec intégration complète, des familles de réfugiés, à la seule condition que ces personnes soient prêtes à s'intégrer avec le reste de la population.

Nous souhaitons un développement résidentiel progressif et ordonné. Dans le cas où l'expansion de l'exploitation des ressources naturelles, soit minières, soit forestières, nécessiteraient un surcroît de main d'oeuvre, nous serions prêts à recevoir une partie de ces gens sans aucun bouleversement ni augmentation sensible des impôts fonciers.

Nous sommes particulièrement soucieux de l'écologie et de l'environnement. Notre rivière Missinaibi, est d'une grande importance pour notre Municipalité et nous comptons bien respecter sa protection et désirons voir se continuer son status de rivière non polluée puisque nous buvons son eau, mangeons ses poissons et en profitons dans nos loisirs et nos activités récréatives.

A quelques lacunes secondaires près, nous comptons dans notre Municipalité tous les services qu'une agglomération de 3000 habitants pourrait exiger dans le Nord de notre Province. Nous sommes fiers à juste titre de ce développement qui a été rendu possible grâce à la vitalité et à la détermination de nos gens. L'assistance de la Province et du Gouvernement fédéral ont rendu ces réalisations possibles.

Pour ce qui est du secteur industriel, nous souhaitons voir le développement de l'industrie artisanale de service, plutôt qu'une industrie primaire, même de moyenne importance. Par exemple, Mattice serait un endroit idéal pour le traitement des sciages, l'emballage et l'expédition des rabotures, la transformation et la remanufacture de certains produits des scieries avoisinantes, ou un centre d'expédition par chemin de fer ou par camion des produits miniers dans la région immédiate.

Dans cette attente, nous encourageons notre population ouvrière à devenir des contractuels du service de l'industrie forestière, pulpe ou sciage, ateliers de réparations et de skidding, camionnage, construction de chemins d'accès, et autres activités de ce genre.

A long terme, nos ressources naturelles nous permettent d'espérer un développement inévitable que ce soit nos dépôts de graviers, notre forêt, notre rivière, nos dépôts de sables à vitre, nos dépôts de Kaoline, de phosphates et autres....

Le futur de l'industrie touristique dans notre région représente un potentiel énorme et très prometteur. Cependant, nous sommes particulièrement soucieux des déficiences de l'environnement et notre mode de vie qu'un développement touristique non-contrôlé pourrait amener dans une petite Municipalité comme la notre. Nous en vivons l'expérience au moins une fois par année à l'occasion de notre Carnaval lorsque nous recevons jusqu'à 2000 visiteurs durant une semaine.

Comme chacune des moyennes et petites Municipalités du Nord, Mattice-Val Côté possède sa propre identité et sa propre vocation en harmonie avec les conditions existantes. Nous entendons bien conserver ces caractéristiques, tout en respectant l'identité et la vocation de nos voisins.

Nous pensons que le Ministère des Affaires du Nord devrait assister les Municipalités du Nord dans leur projets de développement et leurs autres ambitions, sans aucune partisanerie politique, et en toute équité. Ce Ministère devrait également contribuer au développement des industries de transformation afin de compenser les conditions atmosphériques et les rigueurs de l'environnement qui défavorisent les gens du Nord.

Le Ministère des Transports de la Province devrait également se pencher avec considération sur les problèmes particuliers que représente les mouvements de gens et de marchandises dans notre région, à cause du déséquilibre des volumes transportés Nord-Sud comparés aux volumes transportés Sud-Nord. L'industrie locale lutte présentement avec ce Ministère pour que les contrôles désuets soient changés afin de tenir compte d'une façon intelligente et réaliste des conditions du Marché.

Le Chemin de Fer, dans le transport des marchandises et les mouvements des personnes, sont présentement inadéquats. Je qualifierai en particulier l'attitude du Canadien National dans le Nord de l'Ontario de disgrace nationale.

En conclusion, Monsieur le Président, La Municipalité de Mattice-Val Côté que je représente ici, demande au Gouvernement Provincial la continuité et l'amélioration des programmes qui encouragent le développement individuel de chaque communauté, selon ses aspirations propres. En même temps, peut-être qu'une plus grande compréhension de la part des fonctionnaires du Sud sur les problèmes du Nord.

Je vous remercie pour votre attention.

Reeve Paul Zorzetto  
Corporation Mattice - Val Cote  
C.P.-P.O. Box 129  
Mattice, Ontario  
POL 1T0



Honourable Chairman, Ladies & Gentlemen,

First of all, I have to apologize for 2 reasons, for not submitting my presentation ahead of time, and secondly, for presenting my submission in French. As most Northerners, I am quite busy and I did run out of time for translation.

Mr. President, Ladies and Gentlemen,

First of all, following the apologies I just presented, I would like to thank the Royal Commission on the Northern Environment for the opportunity you gave me to submit our views regarding the ability and the mandate of your Commission.

Our municipality, incorporated on July 1, 1975, is made up of two villages, one called Mattice and the other, Val Côté, and are geographically situated on two townships, Eilber and Devitt, a territory of one hundred and sixty-two (162) square miles.

Our population of 1,200 people, are in large part of French Canadian origin. In spite of the exodus of our people, we maintain a very energetic and generous population. Many distinguished people of the region were born in Mattice.

Except for the Transcanada Pipeline Compressor Station, we do not have any industry but Welfare and Unemployment. Nevertheless, our two communities are places where it is good to live.

Our two communities assume the function of satellite for the towns of Hearst and Kapuskasing, and constitute two dormitory villages. Until we are able to obtain our own hospital and high school, our secondary level students attend school in Hearst, while the people requiring hospital care, are also receiving their medical treatment in Hearst.

Since our municipal incorporation, we have improved our garbage collecting and fire fighting equipment well enough to make us self-sufficient in that regard. We have a waste collecting system, complete with two disposal sites, also two fire halls, with all the latest and modern fire fighting equipment operated by firefighters, on a voluntary basis. We have improved the drinking water system in the village of Mattice.

In the recreational field, we have constructed and completely paid for, a one million dollar (\$1,000,000.) arena with artificial ice, for hockey and curling, a gymnasium and community hall.

In 1983, the sewage system for the town of Mattice, will be in operation, at a cost of \$1,250,000.00. We also benefit from an outstanding administrative committee. Equally, we have a municipal library with 15,000 volumes, which answers to the need of our population.

Our people are exacting, proud, generous workers, extremely hospitable and jointly responsible. We benefit from many prospering social clubs, that are very active. An example is the Missinaibi carnival, that is regarded as one of the most important in the north of our province and has an universal reputation. We also have a fifteen unit residence for the aged.

We are now ready to receive and establish a relatively important residential development. In the town of Mattice, with structures in place, and without any shortage of services, we could absorb ten families per year for the next five years.

We are prepared to accept, with complete integration, native families, on the only condition that they would also be prepared to become integrated with the whole of our population.

We are looking forward to a well coordinated and progressive residential development. Should expansions of our natural resources, such as mines or forests, become a reality, and the need for manpower would increase, we would be prepared to accept a part of these people, without disorder or a sensible increase of the property taxes.

We are particularly concerned with ecology and environment. Our Missinaibi river is of a great importance to our municipality, and we intend to respect its protection, and to maintain its status of non-polluted river, since we are drinking its water, eating its fishes, and enjoying it in our leisure or recreational activities.

Disregarding a few missing secondary services, we have, in our municipality, all the services a 3,000 inhabitant community in the North of our province, could wish for. We are rightfully proud of this development, which became possible through the vitality and determination of our people. The assistance from the provincial and federal governments made those realisations possible.

As for the industrial sector, we wish to see the development of the crafts related industry of services, rather than a primary industry, even of a medium-sized importance. For example, Mattice would be the ideal site for the treatment of lumber, wrapping and shipping of wood chips, the transformation and remanufacturing of certain products from the neighbouring sawmills, or a shipping centre by train or trucks for the mining products in the nearby area.

Regarding these expectations, we encourage our working population to become contractors in the services of the wood industry, pulp or lumber, welding and repair workshops, skidding, trucking, access road constructions, and other activities of the kind.

On a long-term basis, our natural resources allow us to expect an inevitable development, either of our gravel deposits, our forest, our river, our glass sand deposits, our Kaoline, our Phosphate or others.

The future of the tourism industry in our area represents an enormous and very promising potential. Nevertheless, we are particularly concerned with some deficiencies in our environment, and by our way of living, an uncontrolled tourism development might bring to a small community like ours. We live this kind of experience, at least once a year, during our carnival, when we cater up to 2,000 visitors for a week.

Similar to the small and medium-sized communities of the North, Mattice and Val Cote have its own identity and its own vocation, in harmony with the existing conditions. We intend to preserve these characteristics, with due respect to the identity and vocation of our neighbors.

We believe that the Ministry of Northern Affairs, in all equity and without political sympathies, should assist the municipalities of the North in their development projects and other ambitions. This Ministry should also contribute to the development of the transformation industries, in order to compensate for the atmospheric conditions and the environmental hardships that penalize the people of the North.



The Ministry of Transportation of the province should also take under consideration, the particular problems represented by the movements of people and merchandises in our area, due to the unbalance of the amounts of goods transported from North to South, compared with the amounts transported from South to North. The local industry is presently fighting with this Ministry to have this obsolete control changed, in order to take into consideration, the market conditions, in a more intelligent and realistic way.

The railway services for transportation of merchandise and travelling of people are presently inadequate. I would qualify the attitude of the Canadian National Railway, particularly in Northern Ontario, a national disgrace.

To conclude, Mr. President, the municipality of Mattice - Val Cote, of which i'm the representative, requests from the provincial government, the continuity and improvement of the programs that encourage the individual development of each community, according to their own aspiration. At the same time, maybe a better understanding from the civil servants of the South in regard to the problems of the North.

I would like to thank you for your attention.

Reeve Paul Zorzetto,  
Corporation Mattice - Val Cote  
P.O. Box 129  
Mattice, Ontario.  
POL 1TO



Received at Hearst  
January 29, 1983

#12

SUBMISSION TO THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

January 29, 1983

from: Cobie M. Love

FEB 10 1983

We in Hearst find that our radio reception is very limited. We are able to receive only AM programs unless we pay for cable through which we are then able to receive a good variety of programs on the FM stations. We'd like to receive FM without having to pay for the cable.

In Hearst there seems to be a private disharmony and misunderstanding between the people of French extraction and other origins. The French feel the others don't want to speak French and the English feel that there is no official effort made to include them in many activities presented in French.

Hearst population is made up of approximately 80% Quebec origin and government cultural agencies and personnel in town tend to reflect only that culture. There should be more diversified cultural enhancement<sup>as</sup> reflected in the community and schools which also represent the Native, European, Asian, African and English Canadian interests.

In the Town of Hearst Urban Renewal Study published in 1970, on page 35, it shows that the Roman Catholic denomination was then about 82% of the population and on page 36 it points out, "This factor has been and probably will continue to be important in the growth and management of social and community services."

Whether or not this should be the case, this situation may be an avenue to investigate from which an exchange and sharing of cultures may emerge. Programs organized by the church such as the February 27 Jour Du Patrimoine being held in Geraldton could

be encouraged. On this occasion the St. Thérèse parish is hosting a multi-cultural event to "understand and appreciate the mosaic of the cultures present in our community." Events of this type might create more harmony and understanding in Hearst.

I have very little conversational French and I am finding it almost impossible to begin speaking it casually. Most people are very accomodating and speak English when they realize my difficulties. I would welcome a program, formal or informal, where the local French is taught in a practical and conversational manner. That would mean being immersed regularly into a program where the only language used is French.

My life in Hearst is very enjoyable, the facilities available are excellent, and the people very friendly but I hope there will be a growth in awareness and respect of all who reside here.



LA 2/11  
-7-7-82  
Received at The Hearst Hearing  
January 20, 1983

HS  
160

SUBMISSION TO THE ROYAL COMMISSION ON THE NORTHERN ENV.

by

LES INDUSTRIES NORDEX

HEARST, ONTARIO, POL 1N0

submitted at the hearings in Hearst, Ontario

LIBRARY January 20 1983

This will be a brief presentation made on behalf of a newly-created local corporation, NORDEX, whose purpose is to develop peat resources found in the Hearst area. Because this is a new venture, the company has not yet begun operation on a commercial basis and is still in the process of assessing the extent of the resource in our area.

Tonight, I will simply present a summary of the events that led to our creation as well as a very brief outline of our future objective.

Officially incorporated not more than a year ago, NORDEX originated from the realization that northern areas need to develop new economic activities while, at the same time, trying to take advantage of potential resources actually found in the North. It is our hope and understanding that peat constitutes such a resource.

The initial impulse came from the Northern Ontario Research and Development Institute who, during the winter of 1979-1980, undertook the preparation of a preliminary study of peat, not only in Ontario and Canada, but around the world, with a particular focus on countries that had been known to use peat for various purposes, eg. Scandinavia, Ireland, U.S.S.R. This study, which took the form of a literature review and of direct contacts with producers, showed that both the needs and the technological know-how were available, but that it was the Canadian supply sources that were inadequate in number. You should be interested to note that this initial work from

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the research institute was funded through the first funding program of this Commission. Even though the results obtained at the time were seen by some of the Commission members as being inadequate, it seems that they were sufficiently adequate to generate within our region an interest that led in 1981 to the formation of This company.

A second phase to the study was undertaken during that year and was mostly concerned with a survey of the Hearst area and of the quality of the major deposits that were subsequently identified. In turn, it was then decided to apply for necessary permits in order to be in a position to start operation as soon as the rest of the required information was available. In this regard, NORDEX now wishes to take advantage of existing NORDA grants to carry out the final stage of the feasibility study and market study.

While we cannot predict when we will be in a position to start operations, we hope that within a matter of months, the area will see a new industry.

The nature of these operations will be to develop peat resources for two purposes, 1) horticultural peat and 2) energy from peat or fuel peat. While these two uses are geared towards different markets, they require similar preparation work in the form of ditching, draining and land clearing. In the area of horticultural peat, we know that Ontario is a net importer and has to go as far as New-Brunswick in order to supply the market. From that perspective, we feel confident that we can develop a position as competitive as that of existing producers elsewhere.

As far as fuel peat is concerned, this possibility has already generated substantial interest throughout Ontario and many others have or are looking into ways of marketing it. This is certainly the case in Northwestern Ontario where

3...

vast deposits have been found. But we feel that Hearst has an advantage in that it has gained through the recent years substantial knowledge of alternative energy technology with such projects as the Hearst Energy complex, the pelletizing plant of Bio-Shell and the OmniFuel gasification plant. Among the 50 members that are part of NORDEX at the present time, many have been directly involved in these projects and can therefore contribute to a great extent to our progress in the fields of energy.

NORDEX is attempting to make the best use possible of local expertise and resources and to show that communities such as Hearst can diversify their economic base and become less dependent of a single industrial activity. We hope that in its report the Commission will emphasize to the provincial government the need to be more than ever before supportive of northern initiatives by making available increased support and by making access to these sources easier than they are at the present time.

NORDEX

Hearst, Ontario

c.p. 2559





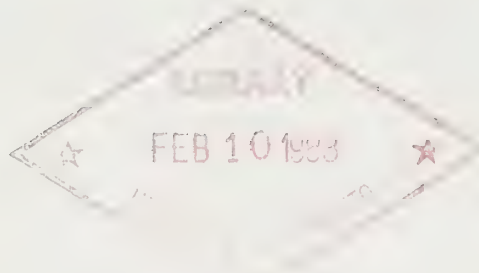
Rec'd Jan. 24/83

# Timmins Chamber of Commerce

HS  
161

January 19, 1983

Commissioner Ed Falgren  
Royal Commission on the  
Northern Environment  
215 Red River Road  
THUNDER BAY, Ontario  
P7B 1A5



Dear Mr. Falgren:

The submission of this brief to the Royal Commission on the Northern Environment addresses the "resource development" within the Province's mining sector.

Throughout the twentieth century the world's demand for minerals has grown steadily, rising yearly almost without interruption.

Early in the century, nations of the Western World were able to obtain their modest mineral requirements from domestic sources. However, as their needs increased, they were forced to turn for supply to a host of mineral-rich nations, of which Canada was but one of many.

At this time of expanding mineral requirements, Canada's main advantage to successful entrance into this supply market was the favourable attitude toward mineral development by Provincial and Federal Governments, which established clear and concise rules for the conduct of the industry. These rules changed infrequently, and then, for the most part, only after consultation with the industry.

Spurred by the world's growing demand for minerals, and favoured with an attractive investment climate, Canada's fledgling mineral industry grew to become one of great wealth and job-creating sectors of the nation's economy.

...2

Late in the 1960's the supportive attitudes of Provincial and Federal Governments toward mineral development began to change, reflecting perhaps, the view of some politician's and their advisor's that the industry no longer needed encouragement, and that it would readily bear added tax and regulatory burdens. As events since 1970 have now so clearly demonstrated that perception was incorrect.

During the 1970's mineral exploration slowed and few new mines were opened. Canadian output of many important minerals declined as did Canada's share of world markets.

Further the worldwide economic recession of 1981 and 1982 has had a sharply negative impact on Canada's mineral industry, resulting in revenue - cost cutting measures, including capital deferments and displacement of a significant number of Canadians either through temporary or permanent layoffs.

These opening remarks highlight, on a national scale, the changes encountered in Canada's Mineral Industry throughout the twentieth century. The scenario's outlined although discussed in a national context are also reflected in Ontario's mineral resource sector.

Throughout this century several mining camps in Northern Ontario, including Matachewan, Kirkland Lake, Elliot Lake and of late Sudbury have witnessed mine closures, either temporary or permanent seriously affecting the economic base of the aforementioned communities.

Further the impact of a depressed minerals industry is felt in Southern Ontario where the people not only want, but need, the mineral products of the north and the wealth these products generate for maintenance of their lifestyles.

Over the past six years the dollar value of the provinces mineral production has experienced little dollar change in present value terms. Further, Ontario's metallic mineral production has declined to 37 percent of the Canadian total in 1981, compared with 40 percent six years earlier. Ontario's mineral industry is important to the economic well being of the people of the province.

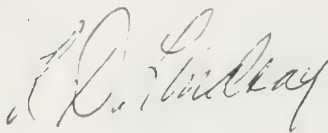
The minerals industry in the Province is presently undergoing severe economic hardships and this coupled with new regulations and restrictions on its activities with no apparent strategic planning by governments aimed at ensuring the industries future development poses concern.

Ontario must maintain its competitive edge in minerals production by developing new resources. It is recognized that these resources must be developed in an orderly fashion with minimal damage to the environment. Some recommendations for achieving these terms of reference include.

- a) Indication by the governments that they support development in the northern reaches of the province (north of 50 degree parallel) including mining, forestry and the infrastructure necessary to ensure the viability of such projects.
- b) The approval process for a new development should be more flexible and less stereotyped, as presently is the case. It should be adopted and suitable for a specific project for which approval is being sought.
- c) The myriad of Canadian Legislation, both Provincial and Federal, relating to environmental quality pertaining to mineral industry development could appear confused and overlapping to the Developer. If the administration from the two levels of government could be coordinated through one "coordinating agency" it is felt the ministry would be able to expedite the process through the complexities of government.
- d) A specific time frame should be defined to avoid excessive delays in the approval process. Excessive delays could result in economic hardships for the developer.
- e) Taxation policies concerning exploration and development would have to be readdressed to ensure developers an adequate share of production profits.

In conclusion, I have proposed various items I feel warrant attention in the provincial/federal resource policy sector which if addressed, and resolved could benefit the minerals resource industry of the province while maintaining an environmentally sound development process, to the benefit of every person in the province whether north or south of the 50 degree parallel.

Yours truly,

A handwritten signature in cursive script, appearing to read "Roy D. Lindsay".

ROY D. LINDSAY  
Resources Committee

TIMMINS CHAMBER OF COMMERCE



CA 2/11  
17-2-83

Received Jan. 24/83

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162



SUBMISSION TO: THE ROYAL COMMISSION ON THE NORTHERN  
ENVIRONMENT

BY: THE ARMSTRONG AREA CHAMBER OF COMMERCE

The Armstrong Area Chamber of Commerce is made up of people in business, social and governmental aspects of this community who are concerned about the future as a whole for this area.

We are an isolate small community whose future may depend greatly on the recommendations made by this Commission to the Ontario Government. For this reason, we request the opportunity to make this representation to the Commission in hope that they will overlook the inexpertise with which it is being presented and realize that we are genuinely interested in and concerned about the planning and development of Northwestern Ontario and in particular, but not only, this area.

Therefore, we have divided this submission into two parts as follows;

- A. General Development of Northwestern Ontario
- B. Local Concerns

#### Part A. General Development of Northwestern Ontario

Forestry, mining and tourism, our three largest industries in Northwestern Ontario, should be encouraged toward better co-operation for better development of Northwestern Ontario and more diversified economic use of our Natural Resources within the area; such as development of secondary industry

Emphasis should be on rehabilitation of the natural resources being used, such as reforestation, stocking of lakes ect. These industries should be encouraged to grow to meet the demands of communities of Northwestern Ontario.

Crown land should be made more available for the purposes of beaches, play grounds and residential use within communities.

Local residents must have direct input into the planning, development and decisions made concerning the future of Northwestern Ontario with government involvement encouraging individual enterprise and growth.

#### Part B. Local Concerns

It is the feelings of the Chamber that the Albany Ogoki Wilderness Park Proposal be abolished and that this area be instituted as a "multiply-use area" to include all facets of use that are presently being practised in this area.

We have in Northern Ontario, three major industries, forestry, mining and tourism and to limit any area big or small to one industry is economic and social disaster.

With proper management of these natural resources we can have the economic development and enjoy the social security of having a bountiful future.

Proper management includes;

A. Refined cutting procedures by the forest industry so as not to inhibit tourism or be detrimental to the environment.

B. Reforestation-" Plant 2 trees for every one that is cut" at least.

C. Develop and stock lakes that have been over harvested.

D. Safeguard certain fragile areas

E. Complete an economic and environmental study on proposed area before decision is made.

Again we state-We are against the wilderness park proposal and stand resolute for a multi-use proposal for this area to the benefit of all concerned.

The last point of issue this Chamber would like to address is the deferred Jackfish River Project. The results of this deferral are as follows;

A. It will put a halt to any major industrial expansion in this area.

B. We are now definitely dependent on the cost and inconvenience of our present diesel power.

C. It creates a loss of opportunity for local development for social and economic growth.

D. We would like to make a formal request for the completed environmental and social impact studies recently completed by Ontario Hydro.

Respectfully submitted by  
THE ARMSTRONG AREA CHAMBER OF COMMERCE





Rec'd Jan 25/83

HS  
163

Bear Trak Wilderness Consultants  
539 Andrew Street  
Thunder Bay, Ontario P7B 2C5  
January 21, 1983

Armstrong Wilderness Outfitters Association  
Warren Smith, President  
Armstrong, Ontario

Dear Warren:

Subject: Royal Commission report regarding the Strategic  
Land Use Plan and the concerns of your association.

As your association requested, I have compiled a report  
to represent their views.

The report deals with the major impacts occurring from  
the following interactions:

- (a) access roads and their effects on the tourist industry,
- (b) resource extraction methods and effects,
- (c) wilderness park designation and the recommendations  
for a "status quo" consideration.

I will be available for further consultation or for a  
representation of these concerns.

Sincerely yours,



Wes Werbowy

ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

J.E.J. Fahlgren, Commissioner

The Strategic Land Use Plan:

Some Concerns Raised by the  
Armstrong Wilderness Outfitters  
Association.

by

Bear Trak Wilderness Consultants  
Wes Werbowy

January, 1983

This publication has been prepared with the financial assistance of the Royal Commission on the Northern Environment's funding program. The opinions, positions and recommendations reflect the thoughts of the Armstrong Wilderness Outfitters Association.

# ABSTRACT

The purpose of this report is to make clear the concerns of those living north of the 50th parallel in regard to the Ministry's Strategic Land Use Plan.

Access roads, resource extraction methods and Wilderness Park Policies form the basis for the concerns in this report.

Access roads should be strictly regulated in order to leave a permanent buffer zone around lakes and navigable waters. Since the "Wilderness" aspect is a resource in itself, it should be protected.

Existing fiber extraction methods are damaging and wasteful. Slash and debris, as well as non-merchantable species could be a source of thermal-electric power to the North in general, and Armstrong in particular. Forest regeneration efforts must be accelerated and modern silvacultural methods must be applied to the fragile ecology of the North. The timber management guidelines should be under the Environmental Assessment Act.

The Whitewater candidate wilderness park should, as acknowledgement of its unique function, receive a "status quo" interpretation regarding wilderness.

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# I

## INTRODUCTION

There are many areas of conflict and concern which arise from the interaction of the Ministry's "Strategic Land Use Program" and those people living North of 50; and, in this case, the Armstrong Wilderness Outfitters Association.\* The items are manifold, but the most pressing issues involve problems arising from:

- (a) access roads and their effects,
- (b) resource extraction methods (involving wood-fiber, minerals and hydro-electric power), and,
- (c) M.N.R. wilderness park policies.

There exists the potential for a peaceful and harmonious resolution to these differences. However, this report must make clear that a growing feeling of resentment exists in the North. This, in part, is due to a frustration caused by discrepancies between what is promised and what is observed. The hopes for compromise could dissolve into disruptive and perhaps violent confrontation unless real and tangible efforts are not soon evident.

\* See appendix 'A'

## II

ACCESS ROADS

Access roads are a necessary component of any resource extraction attempt. These roads not only serve their originally intended function, but they are also beneficial in their capacity to enlarge the scope of forest use. This encompasses activities ranging from the purely recreational to the maintenance functions of tree planting and forest fire access points.

The drawback with access roads is the fact that they tend to give unrestricted access to areas that can not withstand the amount of pressure applied to them. Many lakes which were once legendary in their ability to produce tourist value fishing become "fished-out" once a road access is created. The accessibility destroys the "wilderness" component. Furthermore, if the lake in question contains outpost camps, this industry becomes defunct.

Unless the placement of access roads is carefully considered and stringently monitored, wildlife, fish, and prior industry are threatened.

The "Affleck Report"<sup>1</sup> attempts to give guidelines to ameliorate the disturbance caused by access roads. The con-

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<sup>1</sup>L.M. Affleck et al., Operating Guidelines for Locating Forest Access Roads and Managing Forest Reserves, Ministry of Natural Resources, September, 1981.

cept of "Forest Reserves" is used to act as a buffer zone and the following reasons are given as criteria:

- (i) To provide erosion and siltation protection for adjacent water bodies;
- (ii) To provide for the maintenance of aesthetics on travel corridors (roads, railways, canoe routes, trails, etc.);
- (iii) To provide for the maintenance of forest productivity and utilization of wood fibre;
- (iv) To provide for the maintenance of suitable fish and wildlife habitat;
- (v) To provide for the preservation of certain significant historical, geological, fishery, wildlife or vegetative features.

This beginning is hampered by the abysmally small dimensions of the forest reserves which are to provide the needed protection; this is stated as:

Minimum Depth of Forest Reserves

Major Highways (11, 17, etc.)	- 600 feet
Secondary Highways	- 400 feet
Larger Lakes (100 acres)	- 400 feet
Railways	- 300 feet
Trout Streams which double as wildlife cover	- 100 feet
Significant Portages or Trails where travelled portion cannot be kept free of logging debris	- 100 feet

The whole exercise regarding forest reserves loses credibility when in the Specific Guidelines the first comment is:

"Few, if any, forest reserves should be considered as untouchable timber preserves."<sup>2</sup>

### Discussion

The ultimate use of the forest should not be based solely on economic viability. However, if the economic input of a perpetual tourist wilderness industry is compared to a terminal wood-cutting practice, a case can be made in favour of the outfitters. If, indeed, the jobs that Ontario requires are to be filled by an industry that has a predated short-fall of fiber in less than 20 years, then this application deserves further study. Moreover, if the continuing unsubsidized benefits of tourist industry are compared to the multi-million D.R.E.E. grants to the wood-fiber industry--the tourism aspect begins to be seen in a more favourable light.

Fiber extraction provides very few job opportunities to isolated communities. Usually, bush workers are itinerant labourers who live in camps remote from the community. Most purchased goods are brought with them from larger centers. Little or no financial benefits are bestowed upon the communities which are most affected by timber extraction. The negative legacy involves the permanent destruction of wilderness beauty and a higher incidence of alcoholism among the resident native population.

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<sup>2</sup>Affleck, p. 3.



Since it is the Ministry's statement of policy that :

"The crown owned resources of the Province belong to all the people of Ontario and will be administered in the best interests of the provincial population as a whole, including the special interests of the residents of the areas where the resources are located";<sup>3</sup>

then it follows that a "First User Priority" policy would parallel the concept of native rights. In other words, if an individual or industry has existed in a specific area and has created a life style that does not damage the surroundings, every effort should be expended to protect this style of livelihood. This concept would cover trappers, commercial fishermen and tourist outfitters.

It seems incomprehensible that a livelihood style which arises from coexistence with the natural surroundings should be replaced by an intrusive industry which removes the potential for the existence of the earlier industries.

Access roads also cross navigable waters which, in certain instances, access the entire water shed to indiscriminate use; thereby destroying the tourist based industry.

With selective user-paying fly-in tourism, the habitat can last indefinitely. With uncontrolled access the depletion of the resources, the increase in litter, and the degrading of the wilderness, as we northerners know it, can not be retroactively legislated back into existence. It is a fragile community that can support a quality industry for perpetuity, but only if the wilderness aspect is protected.

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<sup>3</sup>Northwestern Ontario: Strategic Land Use Plan, Ministry of Natural Resources, May, 1982, p. 4.

Recommendations :

- (i) "FOREST RESERVE" should be redefined as: "a permanent protection buffer zone which ensures a wilderness aspect for the surroundings".
- (ii) Any lake which has an established tourist outpost operation shall have a forest reserve of at least 2 km. around its shoreline.
- (iii) All major highways and secondary roads as well as all navigable rivers shall have a minimum forest reserve of 1 km.
- (iv) All secondary roads will be destroyed by scarification or by other means to a distance of 2 km. from the lake or to where they join a main road, whichever is first encountered after logging is completed and regeneration is established. This regeneration is to be completed within 1 year.
- (v) The District Manager will review all pertinent road construction plans for the upcoming year based on the operating plans of the timber company(ies) and/or Ministry plans with the local N.O.T.O. representative or any tourist outfitter affected. This review should be made as far in advance of proposed road construction as possible or as the plans become available.
- (vi) In cases of unresolvable conflict where an access road encroaches closer than the minimums, the affected tourist operator(s) should be given the following options:

(a) priority option to purchase the area involved in the original L.U.P. (or)

(b) selection of a suitable alternative wilderness lake for a new L.U.P. and recompense for the costs of re-establishment.

## III

RESOURCE EXTRACTION METHODS (WOOD FIBER)

Canada's potential exists in the wise use of its resources. However, the extraction of one resource should not lead to the destruction of others. Simply stated, "The forests industry sector and the natural systems are inimical to each other. The forestry sector is most profitable when man can ignore the systems, and the systems are healthiest when not interfered with."<sup>4</sup>

Traditional forest cutting methods have destroyed the wilderness potential of much of N.W.O. Some clear cut areas are so huge that they are visible on satellite photos.

Clear cut areas do not afford an aesthetic vista, but this is only the most obvious of a host of negative factors. This clear cut area destroys available moose habitat with a subsequent decline in moose population. It is often argued that the second growth would be beneficial as a supply for moose foraging. This ignores the fact that the increase in moose fodder is useless if the moose no longer inhabit the area. It also fails to take into consideration the value of this fodder after it has been treated with chemicals and poisons from aerial spraying.

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<sup>4</sup>Gil Schonning, The Forestry, Pulp, Paper and Allied Industries Characteristics and Developments, a submission to the Royal Commission on the Northern Environment, January, 1980, p. 4.



Since clear cuts have become so large (5 sq. km. is not unusual) moose are unable to safely traverse the huge clearings in search of water. Often the cutting continues to the edge of the lakes. This eliminates the moose through selection, since the moose is not a plains dweller; or through predation, since there is no cover left for the moose.

Other factors such as soil erosion and degeneration seem to be disregarded in the quest for wood fiber. Cutting practices often selectively remove all conifers and leave poplar stands untouched. The natural seeding greatly favours this non-desirable species. This is quickly observed by even a casual flight over any area cut in the last twenty years--it is almost exclusively dominated by non-merchantable timber species. This is also evident in the fact that even though logging operations have been continuing in the North for many years, it is difficult if not impossible to find any land that has been re-harvested. The policy seems to be the continual usage of the boreal stands until they are all consumed. This practice denies the concept of trees as a renewable resource.

Although there is always promise of better silvacultural methods, none ever seem to materialize. This is not a newly discovered problem. In 1977, a critical statement by John Blair, then president of the Ontario Professional Foresters Association, summed up the crisis that still exists:

"...over the years Ontario's timberlands had largely been granted under licence to large forest industries with 'little logic behind the distribution of these areas to the timber companies'.

He felt the situation was complicated by the provincial governments' decision in 1962 to transfer responsibility for forest management from private companies to the public sector. This, he said, relegated timber companies to the role of timber extractors, many of whom hired few or no management foresters to replenish the areas they exploited.

'This has brought us to the point where we are now regenerating one-third of our timberlands, neglecting regeneration on one third and letting the remainder regenerate itself. In the case of a farmer, he would be forced out of business in the fourth year.'

The forester offered some figures which cast Canada's record of forest management into doubt. He claimed that while Canada produces far more timber than Sweden, the latter country spends eight times as much as Canada on regenerating its forests. Moreover, the Scandinavian country is on the threshold of doubling the amount spent on silvicultural management.

'The end result is that at the same time Sweden had never had so much quality timber, Canada has never had so little'."<sup>5</sup>

This lack of respect for what seemingly grows for free is evident in the incredible amount of waste that occurs in modern practice. This is obvious in piles of "culls" that are over-mature and not worth the expense of transport to the mill. The slash left on the forest floor is often said to be left for nutritive value. However, this is not substantiated and other studies show this to be a misconception.<sup>6</sup> Basically, this waste often fuels the next year's forest fires.

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<sup>5</sup> John Blair, quoted by Bob Ekholm in The Chronicle-Journal, October 19, 1977.

<sup>6</sup> G.F. Weetman, and B. Webber, "The Influence of Wood Harvesting on the Nutrient Status of Two Spruce Stands": (Pulp and Paper Research Institute of Canada, Pointe Claire, Quebec), January, 1971.

"Altogether, wood left in Canada's forests in harvesting operations and sawmill wastes not otherwise utilized amounts to 12 million tons each year. This can be considered recoverable. Its energy contribution could amount to the equivalent of 36 million barrels of crude oil or about 6% of Canada's current total crude oil use."<sup>7</sup>

This potential energy could be realized by implementing a thermal-electric generating station at Armstrong. In this way needed power and employment could be afforded in lieu of the needlessly costly diesel-electric generation now in service.

The utilization of this "waste" would lead to other considerations:

- (i) Promotion of a more efficient use of our renewable resources. If the waste biomass could be shown to have an economic value in terms of a fuel source, the logging and local industry could benefit from a diversification which involves the use of the whole harvest.
- (ii) Employment--A spinoff industry could be involved which concerns itself with the gleaning of the waste slash. This would have a two-fold effect. First, the local employment base of the woodlands operation could be increased. This would especially benefit a community like Armstrong. Second, the clean-up operations would render cut-over areas more accessible to recreational use.
- (iii) Elimination of a potential fire hazard.

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<sup>7</sup>Morris Wayman, "High Yield Wood: A Promising Fuel", Canadian Forest Industries, December, 1977, p. 27-31.

- (iv) Easier forest regeneration.<sup>8</sup>

Since the implications of the removal of vast areas of forest cover are so complex, the issue of fiber extraction must come under the Environmental Assessment Act.

#### Recommendations

- (i) FOREST MANAGEMENT practices should not be exempt from the Environmental Assessment Act.<sup>9</sup>
- (ii) Strip and block cutting should be implemented with the proviso that the bordering untouched blocks remain as mature forest until the replanted trees are at least 6 feet high.
- (iii) An admission of the critical state of inadequate tree planting. Immediate steps should be taken to quadruple the present effort. This massive employment venture can be well used by both the economy and the forests. Government and Industrial funds must be earmarked for progressive silvaculture research.
- (iv) All cutting near outpost lakes to be accomplished in winter months so as to keep the wilderness experience free from noise-pollution.
- (v) Cutting rights be delegated to local contractors and a priority be given in availing local residents of job opportunities.

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<sup>8</sup>For a full discussion of possible thermo-electric generation from wood waste in the Armstrong area see: Staples, R. and Wes Werbowy, "Watts from Wafers" Research Project of Royal Commission on Electric Power Planning, March, 1978.

<sup>9</sup>"Environmental Assessment for Forest Management", a sub-



- (vi) 'Prior User Policy' be respected in regard to native users, trappers, etc.
- (vii) Every effort be made to limit kraft exports and fund secondary industries with our resources.

#### Resource Extraction Methods (Hydro Power)

The Little Jackfish River is a potential site for hydro-development. By Hydro's estimates approximately 2550 ha. of land and 4000 ha. of water will be inundated behind the dams. In passing, it is of interest to note that these areas, although significant, are miniscule according to areas affected by logging; yet, they are subject to the requirements of the Environmental Assessment Act. As such, the elements affecting the Armstrong area population are simplified.

Two concerns are of major importance. First, if the dams are built, the ensuing reservoir will allow free access to the entire Ogoki system. As such it will erode the tourist potential and out-post value of the area. This will endanger the tourist-based industry at Armstrong. An off-shoot of this is the salting of pickeral spawning. Second, although a major resource is being extracted, there is no provision for any benefit to Armstrong. The socio-cultural impact of a brief construction boom will not give any measurable long-term benefits to the community. In fact, the "boom-bust" effect may permanently damage much in the established lifestyle.

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mission to the Minister of Environment and Minister of Natural Resources on behalf of the Federation of Ontario Naturalists, November, 1982.

<sup>10</sup> Little Jackfish River: Proposal Hydroelectric Development Project--Background, September, 1981.

Recommendations

- (i) In order to avoid oxygen-depletion of the reservoir, the land mass to be inundated should be clear-cut. This is work that should give a job priority for residents.
- (ii) Road and water access must be restricted to keep the areas above the dam in their wilderness state.
- (iii) Compensation should be considered for:
  - (a) loss of existing tourist business in the proposed flood area,
  - (b) indirect damage to tourist potential for other tourist areas possibly accessed by the construction of the dams,
  - (c) socio-cultural damage in the 'boom-bust' construction cycle.
- (iv) The community should receive a benefit for resource use, ie. if thermal-electric generation (as proposed earlier) is not undertaken, then a spur line should be constructed to supply Armstrong with an inexpensive power source.
- (v) The pricing of this power should be at a "favourable rate" to compensate for the 67 megawatts delivered elsewhere and as a compensation for the many years of exorbitant energy costs not subsidized by the government.

Resource Extraction (Mining)

Although no mining enterprise is currently in production in the district, a steady level of prospecting activity remains. Since mining is site-specific and under the Environmental Assessment Act, no conflicts are presently foreseen in this area.

## IV

WHITEWATER CANDIDATE WILDERNESS PARK

A significant land mass to the North and Northwest of Armstrong is contained in the boundaries of the Candidate Wilderness Park known as Whitewater. This one-half million hectares (approximately 1.3 million acres) of beautiful and varying topography has served a multitude of purposes in the past. It has formed the basis of several fly-in outpost establishments. It has also served countless fishermen, hunters and canoeists. These activities have continued in this area for the past 50 years and yet, it is still a wilderness.

Unfortunately, the Ministry's definition of a Wilderness Park would curtail a majority of lifestyles and livelihoods that have co-existed harmoniously for generations.

The goal of the provincial park system is:

"To provide a variety of outdoor recreation opportunities, and to protect provincially significant natural, cultural and recreational environments in a system of Provincial Parks." (Ministry of Natural Resources, 1978, P NE-i-3)

The definitions of a "Wilderness" park would conflict with the existing harmonious use of the Whitewater Area. Quetico Park functions in such a way so as to provide an area ". . . where the impact of man is largely unnoticeable; where the only method of travel is by historic, non-mechanical means."<sup>11</sup>

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<sup>11</sup>Quetico Provincial Park: Master Plan, September, 1977, p. 40.



What is required in the Whitewater area does not fit the same mold. The procrustion urge to make a living working area fit into an artificial definition of wilderness should be avoided. Quetico exists as a jewel of its type; Whitewater should not be a rubber stamp; it should be unique. It should not be forced to follow a definition; rather, a new definition is required.

There is room within the Whitewater framework to allow for the various interpretations of its use. Travel corridors could be set up as specific to primitive travel modes; but canoeists are not the only people on earth. A larger proportion of retired and older people, as well as the handicapped, would be barred from Whitewater if non-mechanized means of travel were the exclusive mode.

Presently, canoeists and those in motor driven boats both use the Whitewater area harmoniously. This is partially due to the vastness of the area. It is also a feature of the landscape that some areas are accessible only by canoe and therefore, self-governing. In this area, aircraft have carried native people and those who chose to come since before World War II. The aircraft is an accepted part of Northern Wilderness. It is in the interest of human safety that airplanes should be allowed access to specific points.

#### Recommendations

- (i) The Whitewater Wilderness park should receive a special consideration to maintain the wilderness as it now exists.

- (ii) The number and location of the existing outpost camps are to be frozen.
- (iii) These outposts will act as "access points" for arrival and departure of aircraft. This would maintain the status quo and also allow for pick-up/drop-off of canoeists.
- (iv) The number of boats and the horsepower of motors to be limited according to a formula arrived at in a later discussion.
- (v) A "buffer zone" be established around the park boundaries where modern and intelligent wood cutting practices can be carried on by native and local people.

V

LAND USE PERMITS

The Ministry controls the number and location of outpost cabins by using a Land Use Permit (L.U.P.). These permits can be cancelled on a 30 day notice. This archaic system of tenure ignores the fact that an entire tourist industry is based on the use of outpost camps. These camps represent a significant cash investment and a great deal of effort. Yet they cannot be used as collateral to negotiate a bank loan. This leaves the investor in a very untenable position and makes more difficult a way of life already burdened with difficulties. Commerce must be fostered and the individual should see a reward for his efforts.

Recommendations

- (i) Commercially used L.U.P. should be replaced by a lease system with an option to purchase.

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APPENDIX 'A'

This proposal is being submitting by the Armstrong Wilderness Outfitters Association comprised of the following active members:

Canoes North Outfitters Bob Ahlin, Dan Brown, owners	Sportsmen's Outfitting & Air Charter Service, Warren Smith
Ferrexco Enterprises Ltd. Bill and Eija Ferring	Waweig Lake Outfitters & Air Service, Bon & Aino Plumridge
Ferring Enterprises Bill Ferring	Whitewater Lodge John and Pat Bilenduke
Huron Air & Outfitters Ernest and Donna Nicholl	Wildwaters Wilderness Shop & Expeditions, Bruce Hyer
Obongo Cottages Victor and Elaine Lawrence	Camp Caribou Bill Ferring & Alonzo Nuttall

Within our proposed boundary area the following outfitters operate:

Patricia Fly-in Camp, Sioux Lookout, Dan Baas-owner  
outpost on Coles Lake

Rusty Myers Flying Service, Fort Frances, Frank Meades-owner  
outposts on Wabakimi, Brennan, Grayson, Granite

Ignace Airways, Ignace, Bob Dowhy-owner  
outposts on Burntrock, Redman, Scragg, Wabakimi (pending)

Northern Wilderness Outfitters, Fort Frances, Vic Davis-owner  
outposts on Tew and Wabakimi Lakes

Clearwater Portage & Canoe Outfitters, Emo, Art Latto-owner  
outpost on Windfall Lake

Whitewater Lodge, Armstrong, John Bilenduke-owner  
main base camp at Whitewater Lake

Camp Caribou, Armstrong, W. A. Ferring & A.W. Nuttall-owners  
outposts on Whitewater Lake N.E. and S.E.

Ferring Enterprises, Armstrong, W.G. Ferring-owner  
outposts on Oliver, Kenoji, Granite Lakes

Ferrexco Ent. Ltd., W.A. Ferring-owner  
outpost on Wabakimi Lake

Sportsman's Outfitting, Armstrong, Warren Smith-owner  
main base camp on Smoothrock Lake, outposts on Elf, Fungler,  
Omadahl, Smoothrock S.W., and Grayson Lakes

Waweig Lake Outfitters, Armstrong, Don Plumridge-owner  
outposts on Dawn, Whitewater, Arril and McKinley Lakes

Ogoki Lidge, Pickle Lake, Phil Robinson-owner  
main base camp on Whitewater Lake

Huron Air & Outfitting, Armstrong, Ernie Nicholl-owner  
outpost on Smoothrock Lake (Almas Bay)

Caribou Lake Lodge, Armstrong, Sonny Rodman-owner  
main base camp on Caribou Lake

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Keep'd Jan. 2010

HS

164

Northern Environment and 'Quality of Life'.

an essay directed to ; Royal Commission on Northern Environment.

submitted by Gus Kotter

ankly, I am baffled by the stagnancy of some of our most important and potent source, manpower. Canadian Manpower. More specific, Canada's nearly 5 million unemployed .

Quality of life may be measured by the following ingredients; Social and Economic interaction, Harmony, Productivity and, most important, fair Distribution of the Necessities of life which I would class as food, clothing, manufactured goods and least but not last access to the stimulus of the fine arts -social activities and entertainment.

Canadian resources are the property of all , A L L Canadians. The honus ought to be on fair chance for participation and distribution.

We ought to seek ways and provide the chance for all Canadians and Residents to work for and share the wealth of our rich resources.

There is no need or justification for so many to be so idle when in fact their efforts and labour could be put to good use with the aim of including their potential in the overall effort ~~in~~ for improving the quality of life of all Canadians.

Obviously, manpower is a resource which we have not yet learned<sup>to</sup> implement properly).

With the right philosophy and direction there is no need to force idleness, or let idleness happen, on any healthy person capable and willing to work.

As it is, the existing workforce, those who are fortunate enough to have and to hold a job, must provide not only for themselves but for the many who are unemployed and for those who are on welfare, plus their dependents. It would be much better and fairer if we would seek ways not only to share the rewards but the labour as well. And if it is gold or money which prevents us from doing ---- well then perhaps it is time we were looking for other ways to get things done within ~~our~~ our lands. For instance; we could have our kind of currency for inland use and another currency and standard for foreign trade.

Perhaps Hitler was not so dumb when he told his listeners; 'We do not need gold or money to overcome poverty, all we need is our ability to work plus a certain amount of determination. We in Canada have the advantage over Hitler in that we do not, or need not depend upon imports of food and natural resources. We have and can produce both in abundance. Is it only lack of

II)

money which prevents us from doing so? If it is then perhaps our dependence upon money is perhaps an EVIL? Internally, that is to say within Canada, we should not entirely depend upon money to get things done.

Imagine a farmer with fields full of crops and a ranch full of beef, telling his wife and children he can no longer provide food because there is no money in the bank.

As a nation we have everything right within our country. What we are lacking, so far, (as we were lacking ~~XX~~ during the thirties,) is the ability and integrity to use what we have in a just way for the good of everyone.

To improve Quality of Life in the North I'd strongly suggest selfhelp, community-work.

To begin with, even the smallest of towns could, through selfhelp, have their community-recreation-centre, with inside, yearround swimming pool and sauna, a dance floor, table tennis, coffee shop, library etc. Young artists should be encouraged to form groups. For music, theatre, fencing etc.

The shell for these centres could be timber, free of course, from crown-land. For swimming pools all we'd have to buy is cement, sand and gravel is usually readily available nearby and local truckers no doubt would volunteer to bring in whatever is needed. Local timber could be cut into boards for floors and ceiling etc. The timber is here, the land is here, the potential workers are here. Why not use it for our own good and that of our youth??? Then watch the rate of crime and juvenile delinquency go down - and our all-over state of health go up, both physically and mentally. The old Greeks used to have a saying; 'A sound mind in a sound body!.

What I mean to say is: ~~XXXX~~ "Let us work toward sound minds in healthy, active bodies". This we owe not only to ~~ourselves~~ ourselves but to our youth, our children.

And would it not make life so much more interesting???

⊗ Juvenile delinquency is usually no more and no less <sup>than</sup> the result of boredom.



Translated & typed from Ojibwa

HS 165

November 9, 1982

I wish to discuss M.N.R's hunting and fishing Policy. I don't want M.N.R to tell me how many animals I should kill and how many fish to catch. I understand that the promise went something like this.

" As long as the sun shines and the river flows,  
you can live off the land. No one will stop  
you".

Also they promised us some kind of a domestic animal, perhaps a cow. To this day I have not yet to see a domestic animal here up north.

Also we don't want all our trees cut down.

I remember the treaty when they made these promises. I am seventy-four now and still fish with net to support my family. I don't want anybody to stop me or any other person for that matter, from fishing ourselves.

I use to make a little money by doing some commercial fishing. Now I don't have a license to fish any lake or a license to hunt. I used to have these licenses before they stopped issuing these to me.

We Indian people like to have money too. Same as the white people and would like to live comfortably just like anybody else.

When the RCNE holds hearings in Red Lake I will make a submission regarding Forest, Fishing and Trapping. Most important to me is the Forestry. I don't have any funds to attend this meeting. I am asking if you could help on this.

Douglas Meekis  
Chief  
Deer Lake Band.

Rec'd Nov. 17/82

Telephone: 807-775-0011  
775-0011  
775-0011

# Deer Lake Band

DEER LAKE, ONTARIO P0V 1N0

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# Ontario Hydro North of 50° —An Update

Rec'd Jan. 21/83

HS  
166

Submission to the  
Royal Commission on the  
Northern Environment



SUBMISSION TO  
THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT  
(RCNE)

ONTARIO HYDRO NORTH OF 50°

AN UPDATE

February, 1983

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## 1.0 INTRODUCTION

Following through on its 1977 commitment to assist the Royal Commission on the Northern Environment (RCNE) in whatever way possible, Ontario Hydro is pleased to provide an update of information previously provided to the Commission.

The information presented covers the following general areas:

- (a) An update of general electrical power system conditions in Northern Ontario;
- (b) A description of the remaining undeveloped hydroelectric potential in Ontario;
- (c) A discussion of the role of hydroelectric generation in Ontario;
- (d) A discussion of broad interests and concerns relating to further hydroelectric generation;
- (e) A description of Ontario Hydro's approach to studying the province's remaining undeveloped hydroelectric potential;
- (f) A discussion of public participation in the planning and approvals process for future hydroelectric generation.

At the present time, Ontario Hydro does not have any additional hydroelectric generation under construction. However, the Corporation is continuing to study hydroelectric generation as a potential energy source to meet future electricity needs.

These discussions are not limited to the area north of 50° but, for the most part, deal with the area of Northern Ontario which is administered by Ontario Hydro's two regional offices in Northwestern (Thunder Bay) and Northeastern Ontario (North Bay).

## 2.0 ONTARIO HYDRO IN NORTHERN ONTARIO

In a 1977 submission to RCNE ("Ontario Hydro North of 50°"), Ontario Hydro provided documentation of our role and system conditions as they existed in Northern Ontario. This section updates that information.

### 2.1 Mandate

Ontario Hydro is a corporation functioning under the terms of the Power Corporation Act, the successor to the Power Commission Act which established The Hydro Electric Power Commission of Ontario in 1906.

The prime purpose of the Corporation is to ensure that Ontario is supplied with electrical energy and that this supply is provided under conditions that will best serve the interests of the total community.

Although Ontario Hydro is primarily a bulk supply utility serving municipal utilities and large industrial customers, its retail system also provides direct service to about 750,000 individual customers in rural areas.

Ontario Hydro's corporate goal is "to meet the requirements of the Ontario community for electric service, including the manner of its provision, so as to result in the greatest overall benefit to that community and in the lowest cost to the consumer for that service over the long term".

## 2.2 System Conditions in Northern Ontario

As Figure 1 demonstrates, the Northeastern Region is a net importer of electricity, although some exports to the Northwestern Region do occur. The net energy situation in the Northwestern Region remains very sensitive to river flows and outputs from hydroelectric generation, and to 230 kV east-west transmission outages. Large power transfers were required in 1977 and 1981 from the Northeastern Region and from Manitoba Hydro to cope with low river flows in those years. The boundaries of Ontario Hydro's northern regions are shown in Figure 2.

A document entitled, "An Overview of Bulk Electricity System Planning for Northern Ontario", is scheduled to be issued early in 1983. This document provides an overview of the adequacy of Northern Ontario supply facilities, and discusses the conceptual options available for the long-term supply of the North. Major studies to consider these options, and involving the public, are not likely to be initiated for about one year.

### 2.2.1 Generation Facilities

The existing electrical generation facilities in northern Ontario comprise fossil-fuelled, hydroelectric and diesel generating stations. Hydroelectric and diesel facilities are owned and operated by both Ontario Hydro and other agencies. These can also be divided into a group of facilities supplying the Bulk Power System of Ontario and those directly connected to localized distribution systems, and not connected to the grid. Appendix A summarizes existing generating and associated facilities near or north of 50°. Since Ontario Hydro's previous submission to RCNE, no new major hydroelectric generating facilities have been added in Northern Ontario but upgrading has been done at the Abitibi Canyon, Harmon, Whitedog Falls and Caribou Falls generating stations. Some additional fossil-fuelled generating capacity has been developed at Thunder Bay GS (300 MW), and is under construction at Atikokan (200 MW).

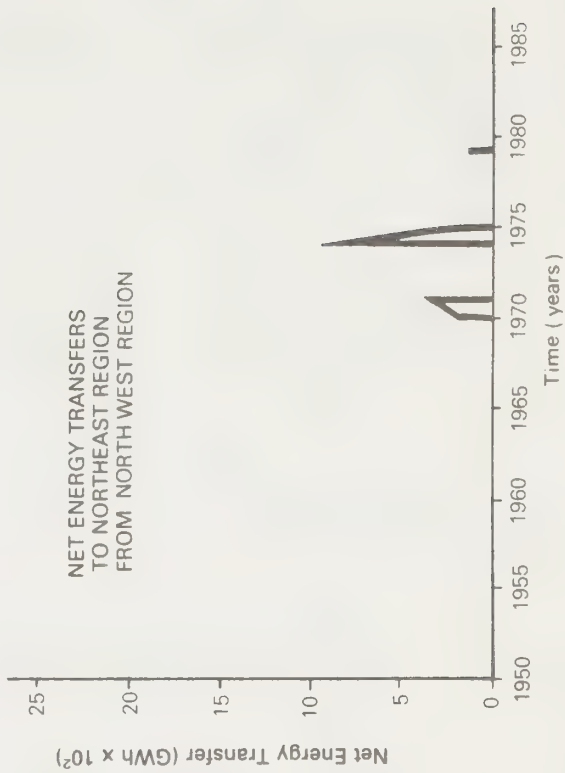
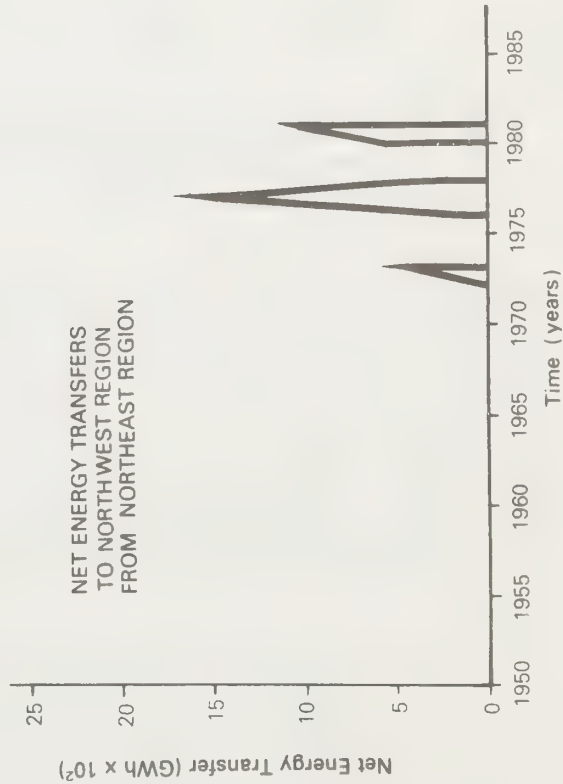
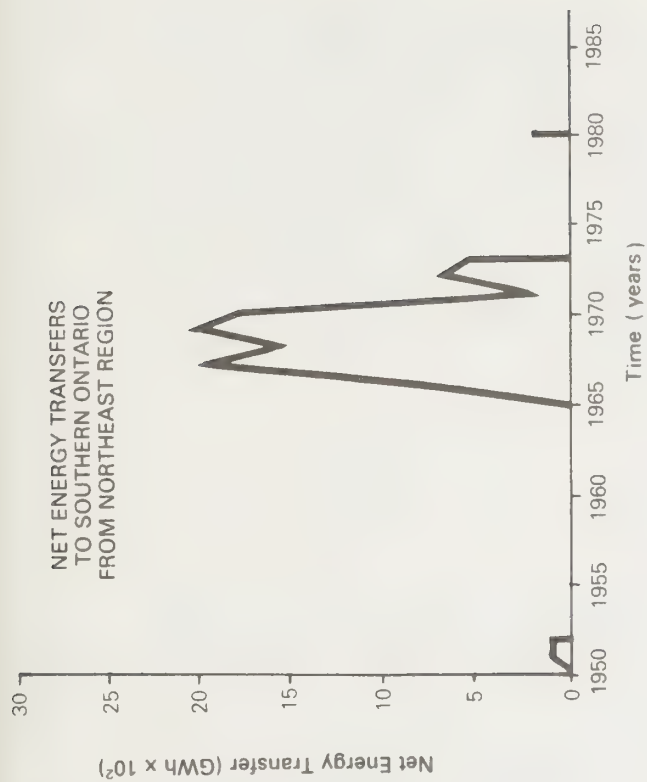
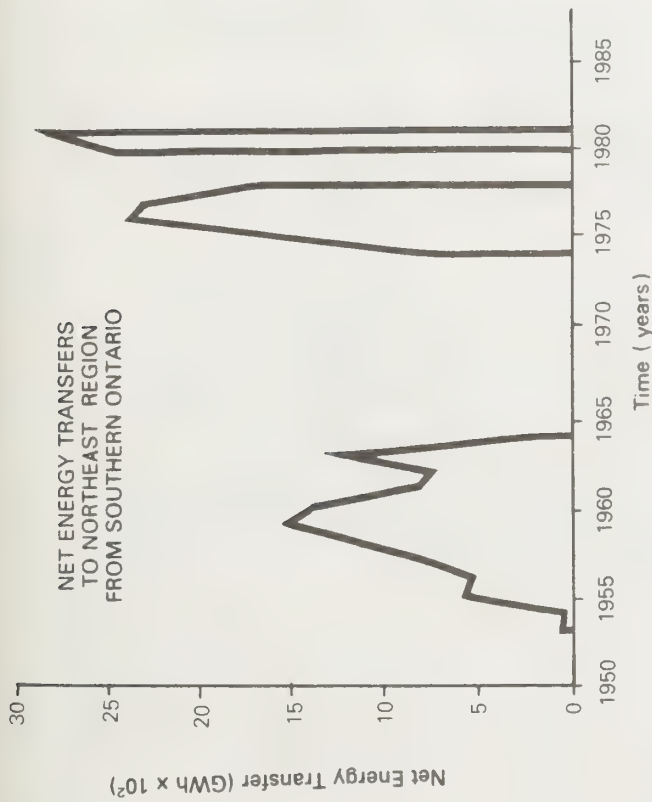


FIGURE 1  
Net Annual Energy Transfers  
in Northern Ontario

NOTE: Refer to Figure 2 for  
Boundaries of Ontario Hydro  
Regions

In its 1977 submission Ontario Hydro indicated that studies were being conducted to determine the feasibility of developing other forms of generation at Hearst and Onakawana. In 1979, feasibility studies for a wood waste energy facility at Hearst concluded that the economics of the proposal were marginal; and the Study Steering Committee recommended that the project be shelved pending results of a study by Shell Canada Ltd. on a proposed wood-ex plant. Studies by Shell proved favourable and the construction of the wood-ex plant at Hearst has been completed. At Onakawana, after three years of study, the Ontario Hydro Board resolved in January, 1982 that development of a mine-mouth, lignite-burning generating station was not economic, and further consideration of the project was subsequently terminated.

#### 2.2.2 Transmission Facilities

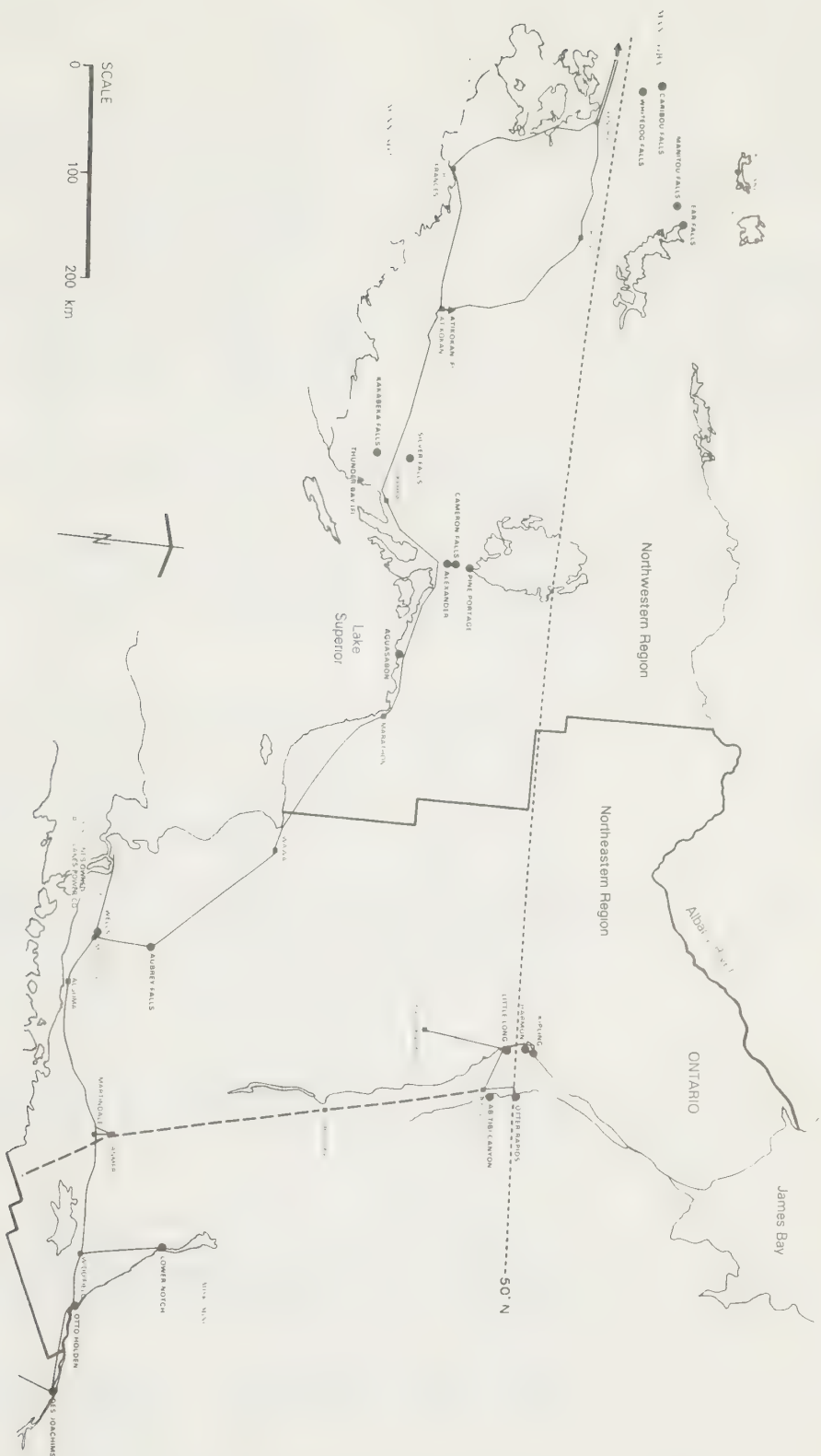
The main elements of the bulk transmission in Northern Ontario are as follows (Figure 2):

- (a) 500 kV lines comprising two single circuits between Toronto (Claireville TS) and Sudbury (Hanmer TS) areas, and a single circuit from Sudbury to Timmins (Porcupine TS) to the Abitibi River basin near Fraserdale (Pinard TS);
- (b) A 230 kV network extending from the Manitoba border to the Quebec border through Kenora, Atikokan, Fort Frances, Thunder Bay, the Algoma area, Sudbury, North Bay and generating stations on the Ottawa River. Most of this system comprises either two single circuit lines or one double circuit line;
- (c) Many 115 kV and some 230 kV lines connecting the main load supply stations and remote generating plants throughout Northern Ontario to the bulk electricity system.

Since 1977, there has been a number of transmission additions in northern Ontario. These include two 115 kV single circuit lines to incorporate new Thunder Bay GS generation, a 230 kV single circuit line from Little Long GS to Kapuskasing, and a 230 kV single circuit line from Lower Notch GS to Dymond TS.

Currently, a 230 kV single circuit line is being constructed in the Atikokan area to incorporate new generation at Atikokan GS, and a 115 kV line is being constructed from the 115 kV system north of Cochrane to Detour Lake. In addition, a proposed 230 kV line between the Atikokan and Thunder Bay areas has been approved under the Environmental Assessment Act and has received an Order-in-Council from the Provincial Government. A proposal to build two 500 kV single circuit lines between the Sudbury and Algoma/Sault Ste. Marie areas was submitted for approval under the Environmental Assessment Act in late 1982.





- LEGEND**
- Existing Major Hydroelectric GS
  - ▲ Thermal GS (Existing and Approved)
  - F – Fossil
  - Existing and Approved 500 kV and/or 230 kV Transformer Station
  - Existing and Approved 230 kV Right-Of-Way
  - - - Existing 500 kV Right-Of-Way
  - ↔ Interconnections
  - OH Regional Boundaries

NOTE: 115 kV lines not shown

**FIGURE 2**  
Ontario Hydro's Existing Transmission and Generation in Northern Ontario

2.2.3 Electrification of Remote Northern and Indian Communities

(a) Retail Electric Service in Northern Communities

Through arrangements with Indian and Northern Affairs Canada (INAC) and the Ontario Ministry of Energy, Ontario Hydro is responsible for power supply to remote northern communities from local diesel-electric plants, local hydroelectric plants or by direct line if practical. The general arrangement is:

- (i) all capital for the generating plants and distribution systems is provided by the appropriate government agency;
- (ii) Ontario Hydro owns all the facilities and is responsible for operation, maintenance and renewal of these systems;
- (iii) eligibility for community electrification is subject to a minimum requirement of 35 homes in communities administered by the Federal government, and 25 year-round customers in other communities. Where only air access is available, a further requirement is the existence of a landing strip acceptable to Ontario Hydro (minimum length 3,500 feet) to provide for the safety of personnel involved in the operation and maintenance of the system. Scheduling of electrification is subject to the availability of funding by the appropriate government agency.
- (iv) estimated average cost to Ontario Hydro of providing service in these communities in 1983 is 44.5 cents per kilowatt hour in communities with air-access only, and 36.5 cents per kilowatt hour in communities with road or rail access;
- (v) restricted residential service (limited to about 5 kW per home) is supplied at the same rate as applies for initial usage to residential services on Hydro's rural system; the approved rate for all usage on and after March 1, 1983 is:

First 250 kWh per month	8.54¢ per kWh
Balance	10.9¢ per kWh
- (vi) rates for standard (unrestricted) service are cost-based; the approved rates for all usage on and after March 1, 1983 are:

Air	Road/Rail
<u>Access</u>	<u>Access</u>

Standard Service 'A'

(Government Services and Crown Corporations)	44.5	36.5
All energy (¢ per kWh)		

Standard Services 'B'

(all other service)	29.7	24.3
All energy (¢ per kWh)		
(Rural residential assistance is provided by government for both 'A' and 'B'.)		

- (vii) the cost of basing the restricted residential rate on the level of the assisted rate for year-round residential service on the Rural System is recovered from all Bulk Power System customers. Any revenue shortfall arising from supply to Standard Service 'B' customers is charged to Rural System distribution costs.

Figure 3 summarizes the status of electrical supply in northern communities.

(b) The Indian Community Program

The INAC (then DIAND) - Hydro program began in 1972 at Ft. Albany. Communities presently supplied are Ft. Albany, Kashechewan, Attawapiskat, Big Trout Lake, Gull Bay, Lansdowne House, Pikangikum, Sandy Lake, Weagamow, and Webequie. Supply to Bearskin Lake, Kasabonika and Sachigo Lake is scheduled for 1983. INAC has identified a further 13 communities which may qualify for service in future (Figure 3).

About 1200 customers are presently supplied of which 82 percent are on restricted residential service. At the time of Hydro's November, 1977 submission to RCNE, there were only 450 native community customers.

(c) Provincial Program for Remote Northern Community Electrification

Under this program, service is presently being supplied to Armstrong, Biscotasing, Oba, Hillsport, and Sultan. All communities serviced meet the minimum requirement of 25 customers.

About 400 customers are presently supplied, of which 65 percent are on restricted residential service. In 1977, only Hillsport (approximately 30 customers) was being served by this program.

The Ontario Ministry of Energy has recently established a task force on the electrification of remote northern communities. Ontario Hydro is participating on this task force.

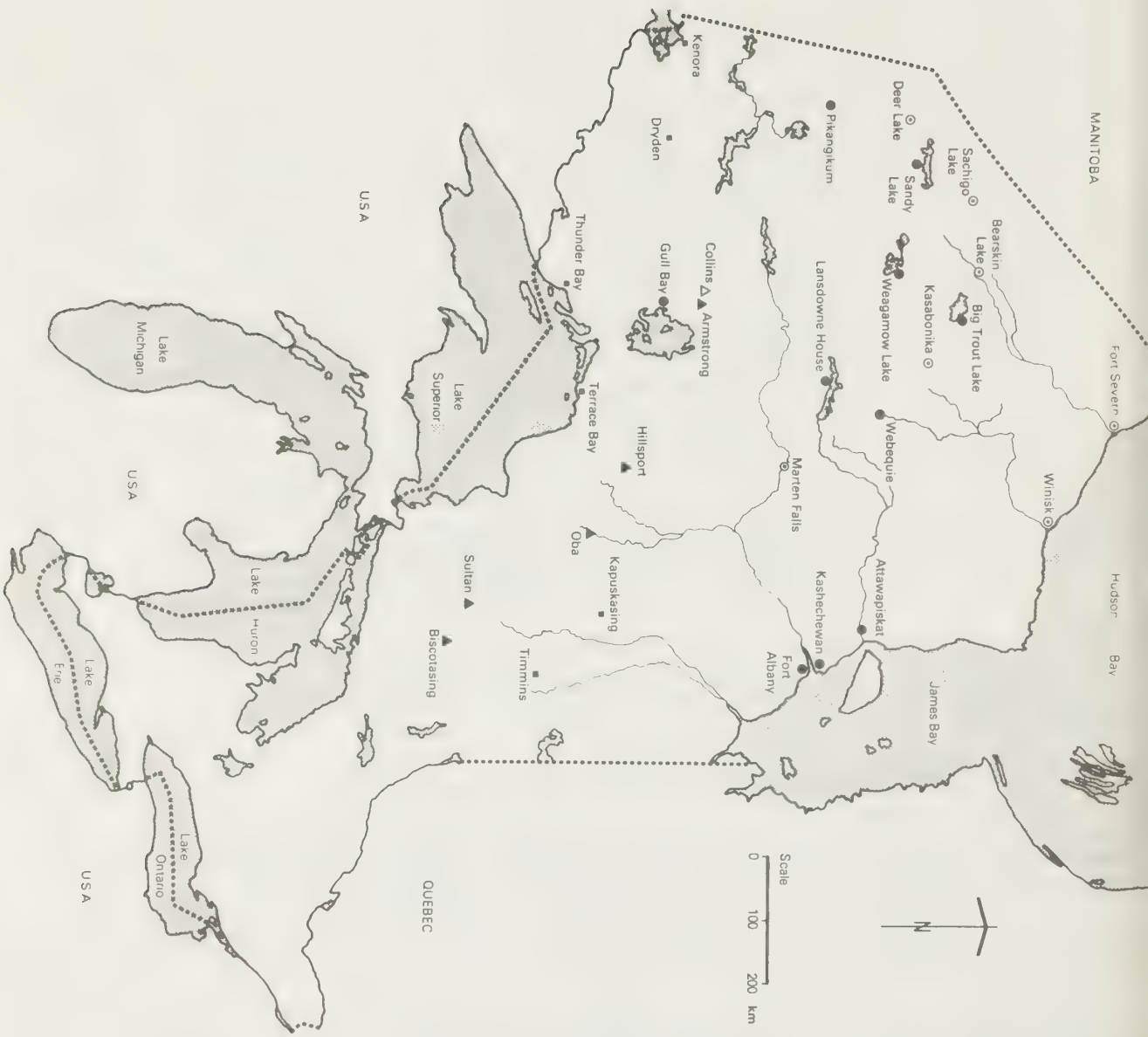


FIGURE 3  
Electricity Supply by Diesel Generation to  
Remote Railway and Native Communities



(d) Alternative Energy Sources

- (i) A 150 kW mini-hydel unit has been installed at Sultan as a test facility. The unit has operated satisfactorily since August 1982 and is expected to provide about 90 percent of the total electricity used at Sultan in 1983.

The Sultan installation includes a standby diesel plant adequate to supply the full load of the community;

- (ii) A 50 kW vertical axis wind turbine has been installed at Coniston to test the feasibility of a hybrid wind-diesel installation, utilizing available wind energy to reduce consumption of diesel fuel. This facility is being operated to duplicate load/supply conditions monitored at Attawapiskat, in order to assess the potential for wind energy use in the James Bay area. This project is a joint effort of the Ministry of Energy, National Research Council, DAF-Indal, and Ontario Hydro;

- (iii) The Ministry of Energy has commissioned a study of energy requirements in northern communities including an assessment of alternate energy sources (wind, diesel, hydroelectricity, steam, wood waste and peat gasifiers). Energy, Mines and Resources Canada is undertaking complementary studies.

3.0 ROLE OF HYDROELECTRIC GENERATION IN ONTARIO

Ontario has a long standing history of hydroelectric development beginning in the late nineteenth century. The early stations were typically small, designed to service localized areas, and were operated by private interests. Immediately following its establishment in 1906, The Hydro-Electric Power Commission of Ontario, now Ontario Hydro, began developing interconnections and purchasing privately-owned hydroelectric stations throughout the province. In subsequent years, the Commission embarked on an ambitious construction program to further develop Ontario's hydroelectric potential. In 1950, Ontario Hydro owned or operated 64 hydroelectric stations with a combined dependable capacity of about 1900 MW.

Up to 1951, Ontario Hydro relied exclusively on hydroelectric generation to meet the ever increasing electricity demands of the province. By the late 1940's, however, it was realized that development of hydroelectric generation alone could not keep pace with growth in electrical demand during the post-war boom years. In 1951, Ontario Hydro brought its first two fossil-steam generating stations into service - Richard L. Hearn GS in Toronto and J. Clark Keith GS in Windsor.

Since 1951, the total installed hydroelectric capacity has increased by about 4,600 MW, however, this substantial increase was overshadowed by the installation in the same period of about 19,000 MW of nuclear and fossil fuelled generating capacity. Hydroelectric stations now supply about one-third of the province's energy requirements (Figure 4).

At present, Ontario Hydro owns and operates 68 hydroelectric stations having a total capacity of about 6,500 MW and an average annual energy output of about 4,010 average MW. Capacity is the maximum power the station can produce, while average annual energy is the average station output over the long-term. The individual stations vary in size from 1,223 MW (i.e. Sir Adam Beck GS No. 2 placed in-service in 1954), to less than one MW (i.e. Bingham Chute, 1923).

Private interests also own and operate about 100 hydroelectric stations in the province. These private stations have a combined installed capacity of about 650 MW and an average annual energy output of about 400 average MW. Most are connected to the Ontario Hydro system.

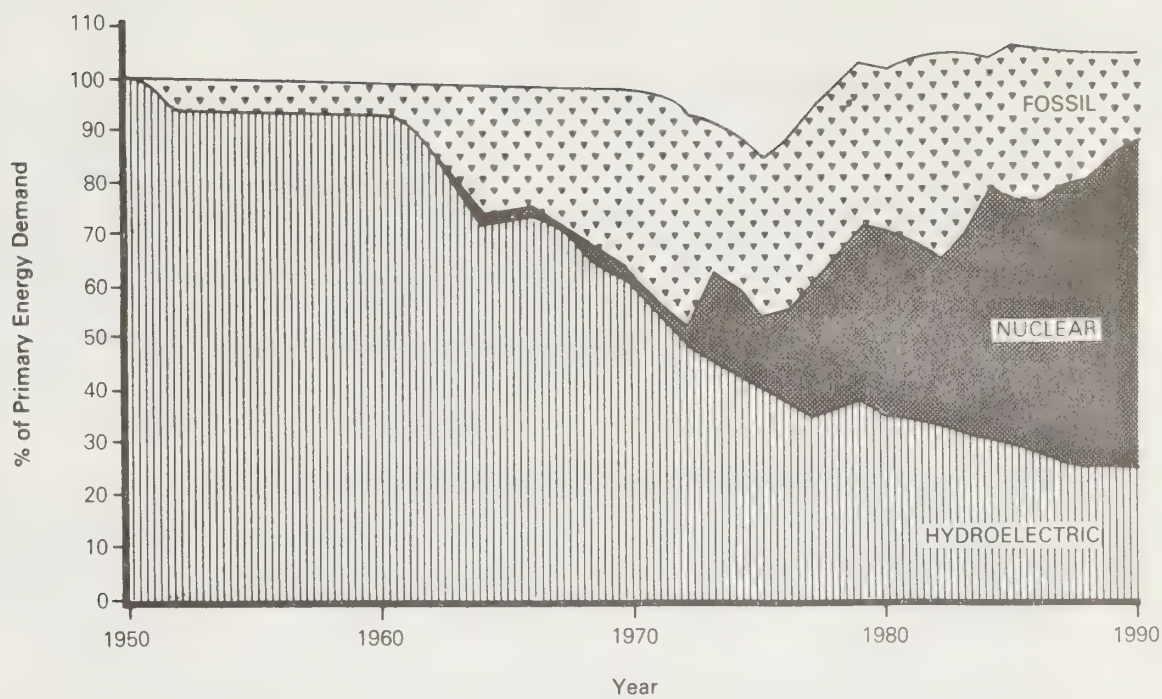
Figure 5 shows the total developed hydroelectric resource in Ontario.

### 3.1 Ontario Hydro System

Currently Ontario Hydro's generation construction program emphasizes the development of nuclear generation. Existing fossil-fuelled generation is expected to be sufficient until the year 2000 at least and the only fossil-fuelled station under construction is at Atikokan.. Ontario's remaining undeveloped hydroelectric resources do not displace the long-term need for the continued development of base load nuclear generation, but they can serve as a complementary energy source.

The power system requires generation that can meet daily changes in load demand. Hydroelectric units respond well to rapid changes in load (i.e. load following) and perform reliably with only minor maintenance. The ability of hydroelectric stations to meet rapid load changes reduces the severe temperature cycles which would otherwise be experienced by thermal units if they were required to start and stop each day. This reduces maintenance and equipment deterioration, as well as the inefficient utilization of fossil fuels during start up and low power operation.

For economic reasons, the installed nuclear generation is presently operated at continuous maximum output. Fossil-fuelled and hydroelectric generation are used to meet load following changes and sudden or rapid changes in system requirements. As more nuclear generation is developed and existing fossil stations are retired, the development of hydroelectric generation could complement the nuclear base load generation in meeting these needs.



NOTE: Energy Production does not total 100% exactly due to sales and purchases via interconnections

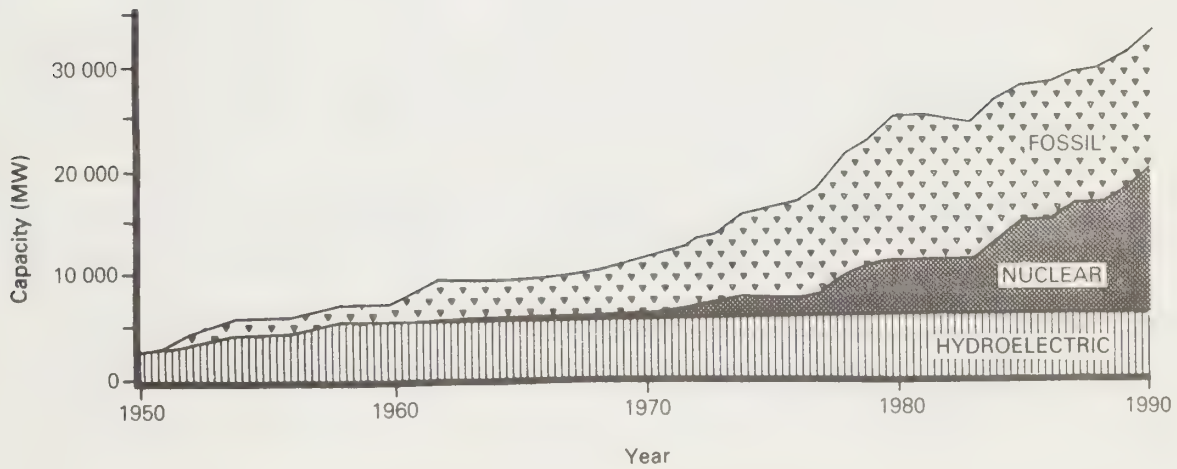


FIGURE 4  
Ontario Hydro Generating Capacity  
and Energy Production by Fuel Type  
1950 to 1990



### 3.2 Provincial Energy Policies

As a Crown corporation, Ontario Hydro receives policy guidance from the Provincial Government, primarily through the Ontario Ministry of Energy. In 1979, the Minister of Energy released a report entitled, "Energy Security for the Eighties: A Policy for Ontario". It identified the importance of increasing the province's energy self-sufficiency through the development of its indigenous and renewable energy resources such as hydroelectric potential, and presented specific initiatives and provincial targets, many of which have direct implications for Ontario Hydro.

#### 3.2.1 Legislative Committees and Royal Commissions

Several legislative committees and royal commissions dealing with development and planning in Ontario have also addressed the issue of hydroelectric development. In general, all recommended hydroelectric development as a useful means of increasing Ontario's energy self-sufficiency. At the same time, they stressed the need for assessment of the technical, social and natural environmental implications of further development. Some specific comments, observations and recommendations regarding hydroelectric development, as well as those of the Ministry of Energy, are outlined in Appendix B.

### 3.3 Benefits to Northern Ontario

Development of additional hydroelectric generation could benefit Northern Ontario in a number of ways. Firstly, it could help to improve the northern supply systems capability to withstand the effects of major transmission outages and help to meet increasing needs of the resource development sector as required (e.g., mining, forestry, etc.).

Some benefits to local and regional economies would be felt since hydroelectric station construction is labour intensive and thus, local goods and services would be required to supply the needs of a construction workforce.

Finally, development in northern areas would likely necessitate the provision of additional transportation links to supply construction manpower, station equipment and materials. This type of development could also open up presently isolated areas of the province for settlement and resource development; always recognizing that different views exist concerning the advantages and disadvantages of improved access to the North.



#### 4.0 THE INVENTORY OF REMAINING HYDROELECTRIC POTENTIAL IN ONTARIO

##### 4.1 General

There is about 8,500 MW of undeveloped potential (including extensions and redevelopments at existing sites) in Ontario from sites larger than 10 MW (i.e. about 2,500 average MW annual energy output). As indicated by Figure 5, most of the developed hydroelectric potential lies in the southern part of the province (Great Lakes/Ottawa River drainage basins), whereas most of the remaining undeveloped potential is in Northern Ontario (Hudson/James Bay drainage basins).

The remaining potential in the northwestern portion of the province (Lake Winnipeg drainage basin) is relatively limited with the most available and attractive sites already developed. Most remaining potential in Southern Ontario (Great Lakes/Ottawa River drainage basin) is small-scale with the exception of extension/redevelopment options on the Niagara and Ottawa Rivers.

Ontario's most significant remaining potential is found in the remote northerly flowing rivers of the Hudson and James Bay drainage basin: Albany, Attawapiskat, Severn and Winisk Rivers with a total potential of about 3,800 MW. One significant factor influencing use of these remote rivers is a government directive restricting their development, pending recommendations from the Royal Commission on Electric Power Planning (RCEPP). To date, this directive remains in place pending work by RCNE.

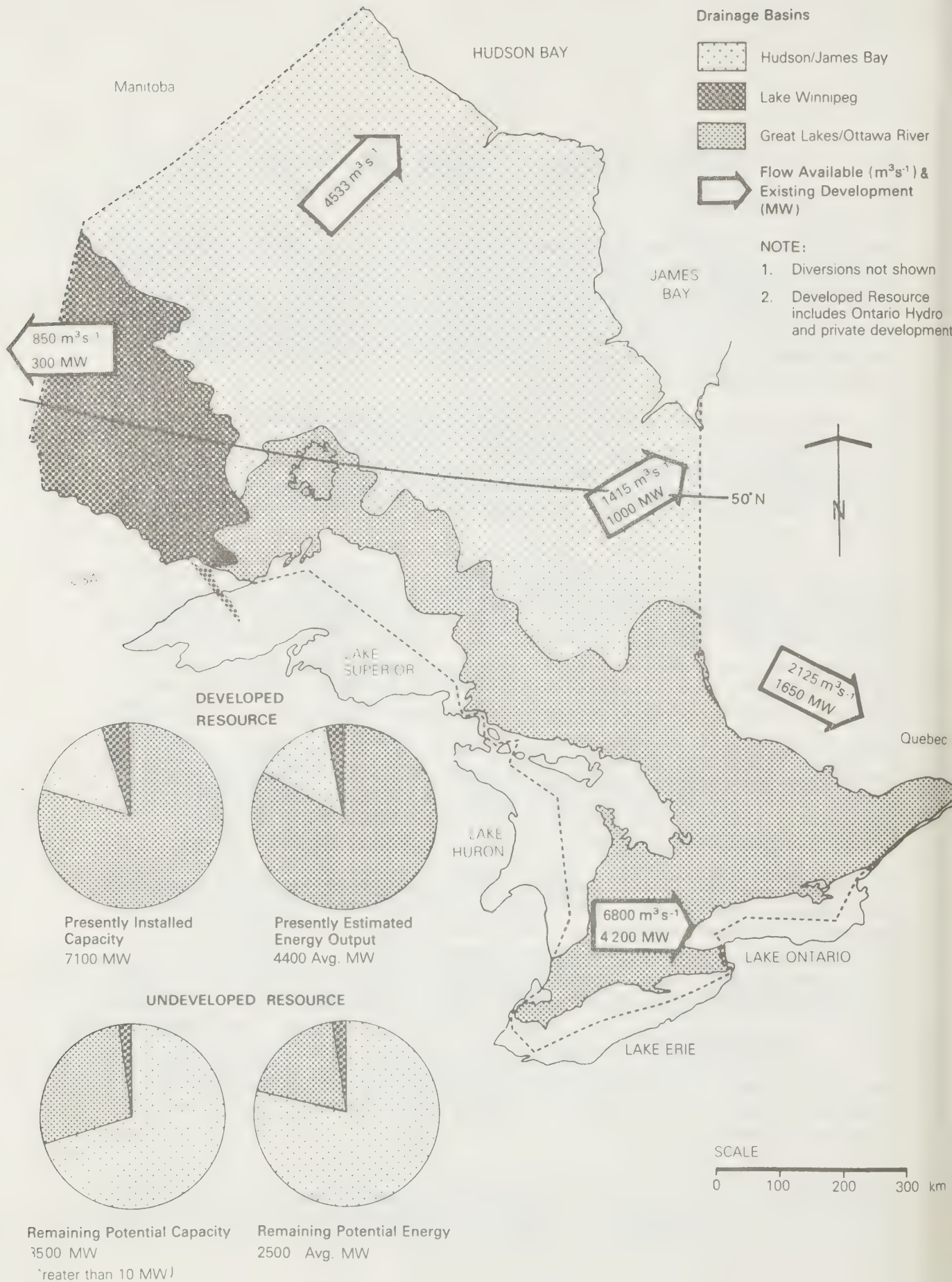
Sizeable potential (about 2,000 MW) also exists in the Moose River basin (including Mattagami, Abitibi and Missinaibi Rivers). Because of its accessibility and relatively short distance to the existing bulk electricity system, development in the Moose River basin is more attractive than development on the other northerly flowing rivers.

A detailed summary of all remaining hydroelectric potential is presented in Inventory Report 1982 (No. 82572) and is submitted to RCNE as a supplement to this submission. It should be emphasized that an assessment of technical and economic feasibility, and of the environmental and social acceptability is required to determine which resources are practical or desirable for development.

##### 4.2 Northern Rivers

The undeveloped hydroelectric potential of the major northern river systems is summarized in Figure 6. Each river system is discussed in more detail below.

A number of these northern rivers has been designated, or proposed, by MNR as Wild River Parks. This, and other types of competing river uses, will have to be considered in assessing opportunities for the development of additional hydroelectric potential on these rivers.



**FIGURE 5**  
Developed and Potential Hydroelectric Resources in Ontario

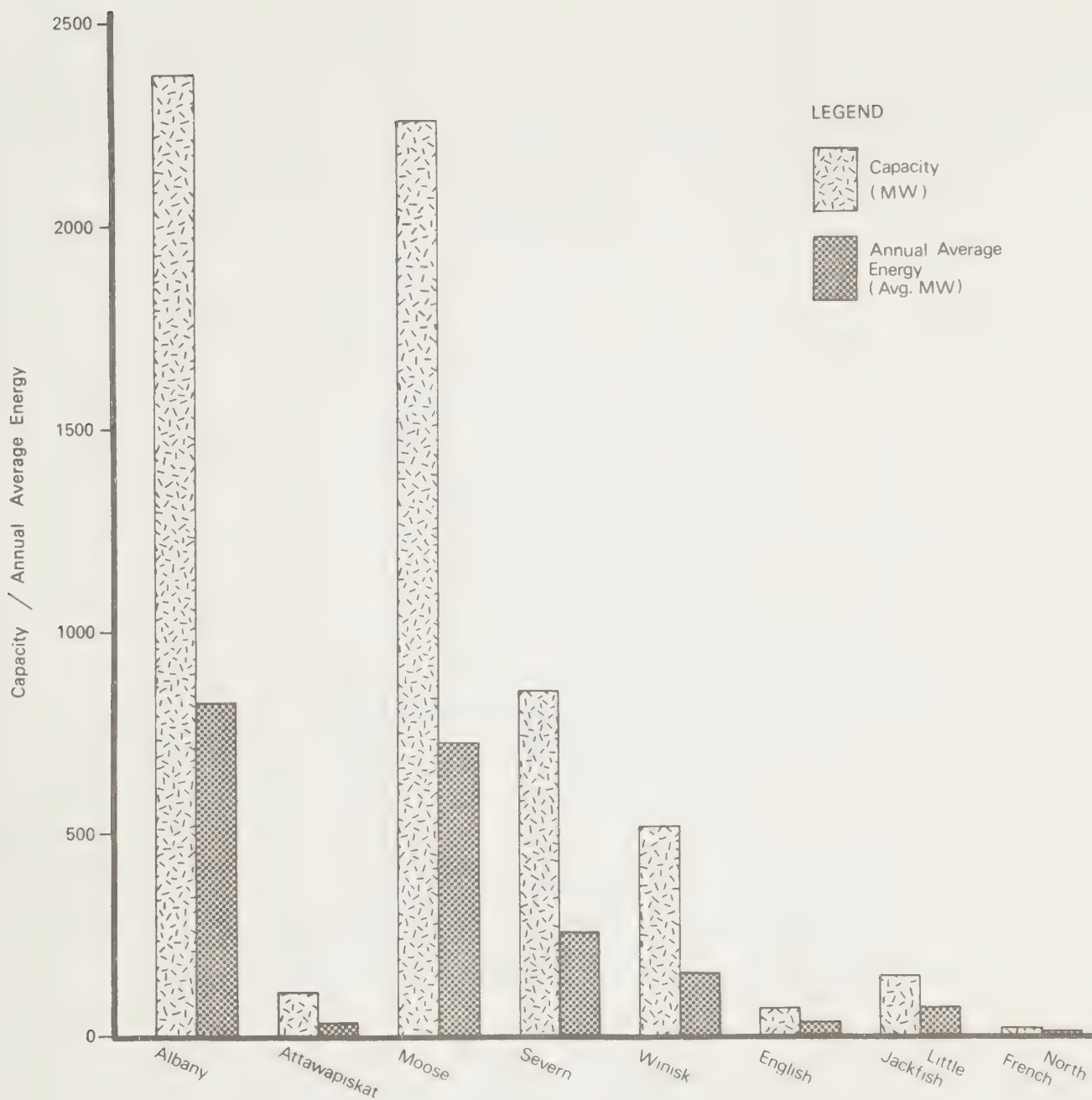


FIGURE 6

Hydroelectric Resource Potential of Major Northern Ontario Rivers







#### 4.2.6 Severn River

Preliminary photogrammetric studies have identified five possible power sites representing an average annual energy potential of 301 MW. The lower reaches of the river are being considered by MNR for a Wild River Park.

#### 4.2.7 Winisk River

Preliminary photogrammetric studies have identified four possible sites representing a total average annual average energy potential of 155 MW. The Winisk is a MNR designated Wild River Park.

#### 4.3 Small Hydroelectric Generation for Remote Communities

Studies have been undertaken to assess various supply alternatives for remote communities including small hydroelectric generation. Preliminary results indicate that small hydroelectric stations may be competitive with diesel generation on life-cycle cost where suitable hydro sites are available.

##### 4.3.1 Research & Development Program, Small Generating Stations and Small Dams

The mini hydel is a prototype installation of a small prefabricated hydroelectric power station with an installed capacity of less than 0.5 MW. These units are designed and manufactured in Ontario. Prefabrication, simplicity and rugged durability are features of this concept which are applicable to isolated northern installations.

##### (a) Wasdell Falls Mini Hydel

The Wasdell Falls unit was placed in-service in 1980. This 145 kW experimental installation is being used by Ontario Hydro to test the mini hydel concept over a four year period at an existing reservoir on the Severn River near Washago, in Southern Ontario.

##### (b) Sultan Mini Hydel

The installation at Sultan is a pilot project combining hydroelectric and diesel generation for power supply to a small community isolated from the distribution network. The project, funded by the Ontario Government, through the Ministry of Northern Affairs, incorporates a mini hydel station, a replacement diesel plant, and conversion of the community distribution system from 600 volts to 2,400 volts. The equipment for this station was placed in-service in August, 1982.

#### 4.3.2 Resource Inventory and Feasibility Studies for Remote Community Hydroelectricity Supply

In 1979, two studies were completed (Ontario Hydro Reports #303-2 and #307-1) documenting the potential for hydroelectric supply near remote native communities and isolated railway communities, respectively.

The data collected in these studies were used in the late 1970's to prepare preliminary feasibility reports for hydroelectric supply for Deer Lake, Sandy Lake, Muskrat Dam and Bearskin.

Proposals for hydroelectric installations at Deer Lake and Sandy Lake for community power supply have been forwarded to Indian and Northern Affairs Canada.

### 5.0 THE ENVIRONMENTAL ASSESSMENT PROCESS AND PUBLIC PARTICIPATION

#### 5.1 The Environmental Assessment Process

Hydroelectric projects which are assessed by Ontario Hydro as being economical, and technically practical to meet system needs, and environmentally and socially acceptable, may be included in Ontario Hydro's long-range generation plans. Before proceeding with the construction phase of any new developments, however, independent review under The Environmental Assessment Act and government approval is required. Each project or series of projects in a river system would be subjected to intensive environmental assessment studies and a program of public involvement carried out in compliance with the EA Act.

#### 5.2 Public Participation

Ontario Hydro encourages public participation in its environmental assessment studies for the following reasons:

- (a) to contribute to decisions that reflect the concerns and values of the community;
- (b) to discuss with the public the benefits of developing the facility, the studies required to locate, construct and operate the facility, the opportunities for public participation, the review process and any related information requests;
- (c) to contribute to the information from which decisions are made by providing knowledge of the area, community priorities and perceptions of possible impacts created by the project;
- (d) to contribute to decisions during the course of the environmental assessment study leading to a recommendation with the knowledge that the final decision-making responsibility rests with the provincial government;

- (e) to establish, maintain and enhance two-way communication between Ontario Hydro and the public throughout all stages of the project.

Ontario Hydro provides a wide variety of opportunities for public involvement during its project planning studies throughout the province. Each program ensures that the interests and concerns of those most directly affected by a proposal are identified and considered. Ontario Hydro's public participation process is well documented and discussed in submissions to and recommendations by the Royal Commission in Electric Power Planning (RCEPP).

#### 5.2.1 Interests and Concerns Related to Further Hydroelectric Generation

Hydroelectric generation projects, like other major projects, can have a wide range of effects on the natural and social environment as well as on the resource base of a community or the province as a whole. Some of the effects are generally desirable, while others are negative and should be avoided or reduced to as low a level as reasonably achievable.

On a regional or local level, public concerns for hydroelectric development in the North generally relate to:

- (a) Opportunities for local employment and job training;
- (b) Electricity supply difficulties in remote Northern communities;
- (c) Native land claims and treaty rights;
- (d) Land use changes;
- (e) Water level fluctuations, water quality, amenities;
- (f) Ecological impacts (fish and wildlife);
- (g) Socio-economic impacts (changes in lifestyle, boom-bust);
- (h) Tourism and recreation (wild river preservation);
- (i) Access and exploitation of northern resources;
- (j) Public participation in the planning process.

On a provincial scale, hydroelectric generation development responds to the Ontario Government's energy policy and concerns for development of indigenous, renewable resources. Hydroelectric development involves a long-term commitment of certain river resources. People who depend on this resource base which would be altered, and who live or use the area of a potential hydroelectric development, would obviously be the most affected by such developments. Therefore, it is recommended that the potential for additional hydroelectric development be identified and documented in provincial and regional resource planning studies such as MNR's Strategic Land Use Plans. In this way, the full range of resource use tradeoffs can be brought to bear in making decisions about future hydroelectric development in Northern Ontario.



### 5.2.2 Ontario Hydro's Response to Public Interests and Concerns

It is Ontario Hydro's policy to manage all of its activities such that the Ontario community receives the greatest overall net benefit in the long term. In keeping with this general environmental policy, planning for future hydroelectric development assumes public involvement and decisions governed by the following guidelines:

- (a) Ontario Hydro will meet all requirements of environmental legislation, and will seek ways of improving standards wherever practical;
- (b) Where specific regulations do not exist, Ontario Hydro will endeavour to develop methods of operation such that adverse effects on the environment are as low as reasonably achievable. Reasonably achievable describes activities or performance levels that can be accomplished within an appropriate time frame and at a cost that is justifiable in relation to the resulting benefits;
- (c) Where Ontario Hydro activities have a negative environmental effect on local areas, but with an overall net benefit to the Ontario Community, suitable offsetting benefits to the affected interests will be considered;
- (d) Ontario Hydro will endeavour to play a lead role in the development and application of new technology to minimize any detrimental effects on the environment.

The most appropriate way to operate a river system for hydroelectric purposes is one where the electrical power or energy output is maximized, while adverse changes to the environment are minimized. Ontario Hydro's citizenship policy for hydroelectric operations is concerned with environmental protection, public safety and good community relations. As such, the operation of a hydroelectric generating station considers: recreation, fish and wildlife management, flood and erosion control, public safety, water supply and other river uses.

More specific policies would be developed to deal with the major concerns relating to any proposed development.

## 6.0 PROPOSED APPROACH TO PLANNING AND DEVELOPMENT OF ADDITIONAL HYDROELECTRIC GENERATION

### 6.1 River System Planning Approach

The future allocation of river system resources for hydroelectric development should take into account tradeoffs in terms of a balanced perspective of water resource sharing. Recognizing this, Ontario Hydro's current strategy in studying the potential for future hydroelectric

development emphasizes planning on a river system level, with the power potential in each river system being examined in conjunction with other complementary or competing resource uses. Preference would be given to development schemes that are not only technically and economically sound but also compatible with the environment and with other resource uses.

Study of each river system would be required to identify a preferred resource management plan. Accordingly, any environmental assessment documentation for further hydroelectric development would address the entire river system and assess the implications on other uses. The river system planning approach should enhance the rationale for hydroelectric development proposals through a systematic evaluation of river development alternatives, and would be consistent with The Environmental Assessment Act.

## 6.2 Planning and Development Process

Ontario Hydro studies examining the feasibility of developing additional hydroelectric potential in the province have involved a multiriver planning process. The objective of these studies is to examine the feasibility for integrated, flexible hydroelectric development within the bounds of technical, economic, environmental and social acceptability.

This work has been underway since 1978 and has involved successive screenings and analyses of available hydroelectric resources in Ontario. Specifically, these studies are proceeding using the following set of guidelines:

- (a) Projects should conform with government energy, environmental and resource use policies;
- (b) Costs and timing of incorporation facilities should be considered;
- (c) Engineering and construction continuity should be pursued to optimize resource use;
- (d) New designs and concepts for efficiency and cost savings should be examined;
- (e) Regional and provincial manufacturing and labour capability should be emphasized;
- (f) Financing and cash flow restraints should be considered;
- (g) Headpond levels should be stabilized as far as possible by in-step development and operation;
- (h) Environmental and social/community concerns should be considered and measures adopted to deal with any adverse effects;

- (i) Opportunities for regional and local benefits (e.g. flood control, remote community electrification) should be considered.

These ongoing techno-economic/environmental studies of remaining hydroelectric resources are to determine when and if the resources can be incorporated into Ontario Hydro system plans. This ongoing review is conducted on a river system scale. It identifies and assesses the total developed and undeveloped hydroelectric resource potential on selected rivers. These studies take place in two phases; (i) Inventory Phase and (ii) Concept Phase (Figure 7). The current emphasis is on hydroelectric development with capacities greater than 10 MW.

Once the feasibility of a particular hydroelectric development is indicated, it may or may not be advanced for more detailed assessment into the Definition Phase. Once the necessary studies have been completed and approvals obtained in the Definition Phase, detailed engineering and acquisition can be finalized, culminating in station construction, commissioning and operation.

Each of these various phases is discussed below.

#### 6.2.1 Inventory Phase

Studies in this phase are focused on the establishment of an inventory of remaining undeveloped and underdeveloped hydroelectric potential (greater than 10 MW) for rivers in Ontario. Plan and profile information is developed for each river as to the relative location of both existing and potential sites, identification as to ownership of existing facilities by Ontario Hydro or the private sector, the location of significant storage, control of flow or flow diversion structures and the potential for improvement in the river system. Existing water-power leases and flooding reservations would also be documented and considered.

To date, 24 rivers have been included in the existing inventory (Ontario Hydro Report No. 82572). Generally, rivers which are partially developed or for which information is available are given study priority.

Using the inventory information, a preliminary river evaluation (using coarse technical and environmental criteria) would be carried out to determine which alternatives are most practical and warrant further study.

The study of this practical potential is advanced to the Concept Phase.

#### 6.2.2 Concept Phase

Prior to commitment of a river system to detailed engineering and environmental studies, feasibility studies are conducted to identify any major technical or environmental obstacles which might preclude development within a river system. Contact would often be made with

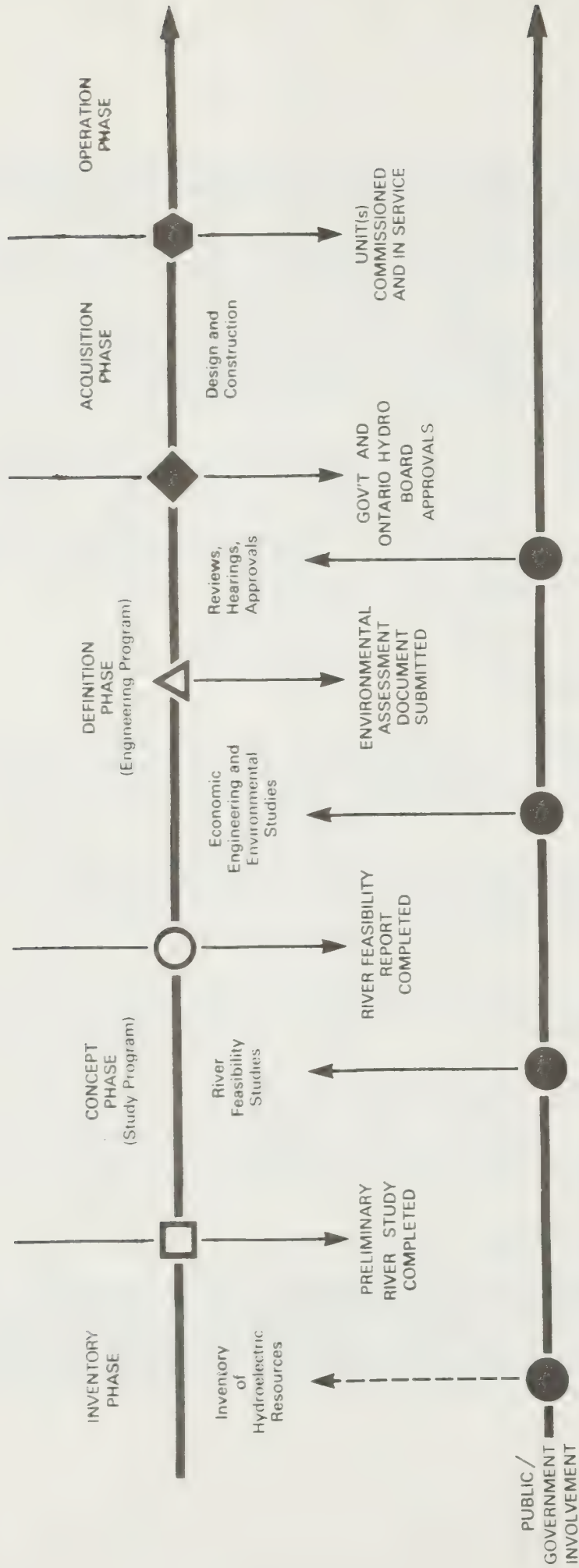


FIGURE 7  
Planning and Development Process for Hydroelectric  
Generation in Ontario



government agencies and various public groups to discuss the study, to aid in identifying major constraints and to verify data being utilized in these studies. The objective in this phase is to minimize project risks within prevailing financial and time constraints prior to beginning more intensive and costly studies during the Definition Phase. Ultimately, this phase identifies the preferred development and operating pattern for the river, determines its feasibility and establishes basic site layouts for projects comprising the proposed pattern. These studies include technical, environmental, social and economic appraisals.

#### 6.2.3 Definition Phase

Undertaking of Definition Phase studies on any project would be contingent on an acceptance of a development's overall feasibility and value to the Ontario Hydro system.

Definition Phase studies for a hydroelectric project are designed to determine the project cost or cost range, to define the project requirements and specifications, and to obtain the necessary approvals so that the project can proceed into detailed design and construction activities.

To do this, social and natural environment studies would be carried out on the project-affected area to collect baseline data and to predict the possible effects of the project on these areas. Consultation with government agencies and the general public would be stressed during this Phase. At the same time, engineering studies would be carried out to confirm the technical viability of constructing the project and to establish the preliminary project specifications. The results of these studies will be combined with input from government, the public and other concerned groups to assess the impact of the project and propose mitigation measures. Based on the environmental data, public input, technical specifications and proposed mitigation measures, an Environmental Assessment Document would then be compiled and submitted to the Ministry of the Environment for project approval.

At this stage, route planning studies would also be required to select locations for the transmission facilities needed to connect the project(s) to the existing grid system, and to complete Environmental Assessment documentation.

If government approval for a project were obtained, the Ontario Hydro Board would then approve release and construction of the project based on final project requirements needed to meet any conditions imposed by the government.

#### 6.2.4 Acquisition and Operation Phases

In the Acquisition Phase, design of the proposed facilities would be finalized and construction would begin. Prior to start of any construction activities, a number of specific construction permits and approvals would have to be obtained (e.g. Water Power Lease, work permits and flooding reservations under the Lakes and Rivers Improvement Act, etc.). Once construction of the facilities is completed, the generating units can be commissioned and operation started.

Ontario Hydro's primary objective and responsibility is to provide the people of Ontario with a reliable supply of electric power at its lowest possible cost. In pursuing this objective, Hydro recognizes the further, and equally important responsibility of ensuring that the health, safety and well-being of the public, the environment and its staff are safeguarded. From this responsibility have evolved the controlling "citizenship" philosophies. Any proposed hydroelectric facilities would be designed, constructed and operated in accordance with these philosophies.

#### 7.0 CONCLUDING REMARKS

Ontario still has an undeveloped energy resource in its remaining hydroelectric generation potential. Although no new hydroelectric development is presently being designed or constructed by Ontario Hydro, the Corporation is continuing to study the feasibility of developing additional hydroelectric resources to meet the province's future electrical needs. Assessment of the ability of hydroelectric generation to meet these needs are required before any future hydroelectric development activities are undertaken. These assessments would include the technical, economic, environmental and social aspects of proceeding with development.

The multi-phased planning process described in this submission should produce an appropriate framework for hydroelectric development decisions. It would identify and evaluate potentially significant environmental effects at a stage when alternative solutions, including remedial measures or a decision to go no further, are available to Ontario Hydro. New hydroelectric development would involve a long-term commitment of river resources, and could have noticeable effects on both the social and natural environment.

All future hydroelectric development proposals require approval under The Environmental Assessment Act. These assessments would address the rationale for future proposals and give due consideration to alternative uses of Northern Ontario river resources.

Ontario Hydro recognizes the need for pre-submission consultation with the Ministry of the Environment, concerned Government reviewers and public interests. Ontario Hydro's planning process provides ample opportunity for review and feedback by regulatory agency staff and the public before Government approval is sought and Ontario Hydro commits construction. This process, together with Ontario Hydro's environmental protection/mitigation philosophy, following the "river system" approach, should lead to developments which are technically and economically feasible, and environmentally and socially acceptable.

APPENDIX A  
EXISTING GENERATION FACILITIES  
IN NORTHERN ONTARIO



APPENDIX A

Existing Generation Facilities in Northern Ontario

1. Ontario Hydro

1.1 Hydroelectric Generation

Ontario Hydro's existing hydroelectric generation facilities in Northern Ontario amount to nineteen (19) generating stations having a total installed capacity of 2107 MW and producing about of 1087 average MW of electrical energy per annum. This energy is fed from the stations into the provincial electrical grid system and also to northern communities and industries, such as Moosonee, Red Lake, Sioux Lookout, Crow River and Nakina which are connected to the distribution network. For details of the size and location of the generating stations, see Table A-1 which follows.

2. Other Ontario Hydro Generation at Locations  
Connected to the Grid System

A 400 MW fossil-fuelled generating station is located at Thunder Bay.

3. Other Ontario Hydro Installed Generation at  
Locations Not Connected to the Grid System

These installations supply remote communities.

4. Other Related Ontario Hydro Facilities

Colonies

In conjunction with the Ontario Hydro owned hydroelectric generating facilities and to facilitate their operation and maintenance, there is an Ontario Hydro colony at Ear Falls consisting of 23 houses. A former colony at Abitibi Canyon has been demolished as an economy measure.

Roads

Also associated with the hydroelectric generating facilities are approximately 134 miles of road north of latitude 50°N as detailed in Table A-2. With the exception of the 50 miles of road from Fraserdale to Little Long GS, Harmon GS and Kipling GS, these roads have been turned over to the Ontario Government.

TABLE A-1

Ontario Hydro Major Hydroelectric  
Generating Stations in Northern Ontario

<u>Generating Stations</u>	<u>River</u>	<u>Station Capacity (MW)</u>	<u>Annual Energy (Av. MW)</u>
<u>Northeastern Region</u>			
Abitibi Canyon	Abitibi	293	172
Otter Rapids	Abitibi	175	88
Harmon	Mattagami	129	81
Kipling	Mattagami	136	82
Little Long	Mattagami	122	74
Red Rock Falls	Mississagi	40	24
Aubrey Falls	Mississagi	130	23
Wells/Rayner	Mississagi	246	47
Lower Notch	Montreal	228	49
	TOTAL	<u>1,499</u>	<u>640</u>
<u>Northwestern Region</u>			
Caribou Falls	English	77	61
Ear Falls	English	19	15
Manitou Falls	English	72	44
Whitedog Falls	Winnipeg	65	46
Pine Portage	Nipigon	129	89
Cameron Falls	Nipigon	72	59
Alexander	Nipigon	65	49
Aguasabon	Aguasabon	40	35
Kakabeka Falls	Kaministikwia	24	22
Silver Falls	Kaministikwia	45	27
	TOTAL	<u>608</u>	<u>447</u>

TABLE A-2

Roads Associated With  
Ontario Hydro Hydroelectric Generating Facilities

	<u>Distance</u> <u>Miles</u>	<u>Distance</u> <u>km</u>
Smooth Rock Falls to Fraserdale	46	74
Fraserdale to Abitibi Canyon GS	2.5	4
Fraserdale to Little Long GS	32	51
Little Long GS to Harmon GS	11	18
Harmon GS to Kipling GS	3.5	6
Ear Falls GS to Manitou Falls GS	9	14
Minaki to Whitedog Falls	18	29
Whitedog Falls GS to Caribou Falls GS	<u>12</u>	<u>19</u>
TOTAL	<u>134</u>	<u>215</u>

### Water Storage and Diversion Schemes

In association with hydroelectric generating stations, there are five major river diversion schemes built and operated by Ontario Hydro.

#### The Albany/English System (Root River Diversion)

A portion of the Albany River watershed has been diverted to Lac Seul (English System) by means of the Rat Rapids and Cedar Channels Dams. The diverted waters flow through the Lake St. Joseph Diversion Dam and down the Root River to Lac Seul, the major storage reservoir on the English River (and ultimately to the Winnipeg and Nelson River systems in Manitoba).

The Ear Falls Dam at the outlet of Lac Seul is owned by the Ontario government and is operated by Ontario Hydro under instructions from the Canadian Lake of the Woods Control Board.

The waters of Lac Seul and other headwater lakes drain the English River through the Ear Falls, Manitou and Caribou Generating Stations and thence into the Winnipeg River serving six generating stations in Manitoba.

#### The Albany/Nipigon System (Ogoki Diversion)

A portion of the flow from the Ogoki River watershed has been diverted into the Nipigon River watershed by means of the Waboose and Summit Control Dams. The diverted waters flow through the Summit Control Dam via the Little Jackfish River into Lake Nipigon the major storage on the Nipigon River. Lake Nipigon discharges water via the Nipigon River through Pine Portage, Cameron and Alexander Generating Stations and thence into Lake Superior.

#### The Kenogami/Long Lac System (Long Lac Diversion)

A portion of the Kenogami River watershed has been diverted through Long Lac by means of the Kenogami and Long Lac Control Dams. The diverted waters flow through the Long Lac Control Dam down the Aguasabon River to the Aguasabon Generating Station and thence to Lake Superior.

A summary of storage and diversion facilities located in northern Ontario appears in Table A-3.



TABLE A-3

Water Storage and Diversions

<u>System</u>	<u>Dams</u>	<u>Storage Area</u>		<u>Range</u>	
		<u>Sq. Mi.</u>	<u>km<sup>2</sup></u>	<u>Ft.</u>	<u>m</u>
<u>Albany/English</u>					
(Root River Diversion)					
Rat Rapids Dams	2				
Cedar Channels Dams	2				
Lake St. Joseph					
Diversion Dam	1	237	614	9.2	2.8
Lac Seul Storage	1	594	1,538	16	4.9
<u>Albany/Nipigon</u>					
(Ogoki Diversion)					
Waboose Lake Dam	1				
plus various auxiliary dams		63	163	6.7	2.0
Summit Lake Control Dam	1				
plus auxiliary dam		35	90	6.7	2.0
Lake Nipigon Storage	1	1,752	4,536	9.0	2.7
<u>Abitibi River</u>					
Newpost Creek Diversion Dam	1	-	-	-	-
<u>Mattagami River</u>					
Opasatika Diversion Dam	1	14	36	7.5	2.3



APPENDIX B

LEGISLATIVE COMMITTEES AND ROYAL COMMISSION  
COMMENTS REGARDING HYDROELECTRIC DEVELOPMENT  
IN ONTARIO

APPENDIX B

(A) Royal Commission on Electric Power Planning (RCEPP)

Recommendation Respecting Hydroelectric Generation and Other Renewable Energy Sources (Recommendation 11.10 in Final Report, February 1980):

"In analyzing the options for increasing the province's capacity for energy self-sufficiency, a systems approach should be adopted in which the incremental costs of conventional electricity generation are compared with the unit costs of conversion of renewable energy technologies taking into account the load characteristics of each end use."

Submission/Reports Regarding Hydroelectric Development

1. Fisheries and Environmental Canada, Electric Power in Ontario from an Environmental Perspective, May 10, 1977.

Recommendations submitted on this document are noteworthy, particularly in regard to the potential new development in Northern Ontario:

- Any decision to proceed with hydroelectric power development in Ontario should be made only with a full understanding of potential environmental, social and economic impacts on the area. Environmental consideration should be incorporated at each stage of planning and development.
  - A detailed inventory should be made of renewable and nonrenewable resources, and an understanding gained of significant ecological relationships in areas designed for flooding. Reservoir management plans should, wherever possible, be designed to fit the reservoir into the natural ecosystem of the area.
  - As an integral part of hydroelectric power development in northeastern Ontario, steps should be taken to ensure continued productivity of the lower rivers and the estuary and inter-tidal zone that may be affected by such development.
  - Included in decisions on hydro power sites should be consideration of the environmental, social and economic impacts of the infrastructures necessary to support the development site, as well as the impacts of the industrial activity and population growth which such developments will attract.
2. Acres Consulting Services, Hydroelectric Potential and Other Renewable Energy Sources Remaining in Ontario, May, 1977.



3. Ontario Hydro, Generation-environmental, March, 1976.
4. Ontario Hydro, Generation-non-nuclear, May, 1977.
5. Ontario Hydro, Generation planning processes, May, 1976.
6. RCEPP, Final Report, February, 1980.
- Volume 2 - The Electric Power System in Ontario.
- Volume 4 - Energy Supply and Technology for Ontario.
- Volume 6 - Environmental and Health Implications.
7. Ontario Ministry of Natural Resources Submission, April, 1978.
8. Ontario Ministry of the Environment, Electrical Energy and Energy Use, June 1, 1977.

(B) Royal Commission on the Northern Environment (RCNE)

The Commission concerned itself mainly with the northern remote rivers (i.e., north of 50°). In its Issues Report (December, 1978), the Commission identified the following hydroelectric development issues (Chapter 4 - The Dynamics of Power-Energy Projects):

1. Concern for native rights on the Albany and other northern remote rivers (Treaty 9), as well as rights on the Mattagami and English Rivers.
2. Needs for displacement of diesel generation to supply electrical needs of small remote communities (rural electrification program).
3. Resentment of Northerners regarding exploitation of northern resources for transfer to south.
4. Need for socio-economic and environmental studies of hydroelectric development.
5. Need for proper compensation for land and resources lost as a result of flooding.
6. Concern for water level fluctuation problems (e.g., effects on fish, wild rice production, trapping).
7. Need for more public involvement in the planning process for further hydroelectric development.

8. Concern for destruction of heritage resources (particularly, Indian burial grounds).

Submission/Reports Regarding Hydroelectric Development

1. Ontario Hydro, Ontario Hydro north of 50°, November 1977.
2. Ontario Ministry of Energy, Submission to RCNE, November, 1977.
- (C) Select Committee on Ontario Hydro Affairs

Recommendations made in the June, 1976 report, "A New Public Policy Direction for Ontario Hydro" with respect to hydroelectric development:

1. Recommendation III-26:

"Ontario Hydro in developing a new generation plant ensures that small hydraulic sites are used wherever feasible and that the potential of solar energy is appropriately tapped."

2. Recommendation III-27:

"The Ontario Government accepts responsibility now for taking all necessary steps to ensure that Ontario receives maximum reasonable benefit from the hydroelectric potential of the James Bay watershed".

The Select Committee also noted that concerns of native peoples and potential environmental problems will have to be addressed before any development can take place in Northern Ontario.

Submissions/Reports/Hearings Regarding Hydroelectric Development

1. Ontario Hydro, A report in response to Select Committee Recommendation III-26, November, 1977.
2. MNR, Presentation to Select Committee, January 21, 1981.
3. Sierra Club of Ontario, Notes of presentation regarding hydraulic generation of electric power, January 18, 1981.
4. Acres Consulting Services, Hydroelectric potential remaining in Ontario, January, 1981.

5. Hearings

Date	Transcript Volume	Organization/ Topic	Witnesses	Page Nos.
20Jan81	HA-13	Ontario Hydro/ Hydraulic Issues	J.E. Wilson G.F. McIntrye R.J. Walters	1 to 51
21Jan81	HA-14	Ontario Hydro/ Hydraulic Issues	G.F. McIntrye R.J. Walters	1 to 17
		Acres Consulting Engineers/ Hydraulic Issues	L.H. Anderson I.W. McCraig	17 to 51
21Jan81	HA-15	Ministry of Natural Resources (MNR)/ Hydraulic Issues	E.M. Cressman T.M. Kurtz W.P. Small	1 to 52
22Jan81	HA-16	Orillia Water Light and Power Commission (OWLP)/Hydraulic Issues	D.J. Crawford J.D. Dearden T. Foster D. MacDonald	1 to 55

5. Hearings

Date	Transcript Volume	Organization/ Topic	Witnesses	Page Nos.
22Jan81	HA-17	Grand Council Treaty #9/Hydraulic Issues	D. Cromarty L. Louttit	1 to 34
27Jan81	HA-18	Ministry of Energy/ Transmission Issues	M. Rowan	1 to 26
		Ministry of Energy/ Hydraulic Issues	R. Lundeen	26 to 50

(D) Board of Industrial Leadership and Development (BILD)

The following recommendations were made by this Cabinet Committee on their January 27, 1981 report, "Building Ontario in the 1980s", regarding hydroelectric power and energy issues in general:

1. Increasing dependency on electricity recommended in line with federal "off-oil" policy.

2. Substitution of indigenous energy resources (i.e., nuclear, hydroelectric) for petroleum and other fossil fuels to provide greater energy security.
3. Strengthening the supply, utilization and commercial adoption of Ontario's innovative and highly reliable electrical power system.
4. Reduce Ontario's use of coal and thereby reduce both costs and pollution.
5. Development of small-scale hydroelectric projects to provide electricity in remote communities.

(E) Standing Committee on Resource Development

The committee has reviewed and endorsed the development of further hydroelectric resources in Ontario, Minutes of Debate, (April 29, 1980).



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Rec'd JAN 18 1983

HS  
167

Dear Sir,

January 18, 1983

My name is Georges Nadeau. I am a wood contractor in Timmins area. I cut or hire men for cutting in patented claims, veterans lots. and crown land area. Depending on the season I hire 10 to 15 men. Most of the ressources for small contractor like me are in the crown land area.

I am against the project of giving 22 township in the Timmins area to the company Mallette Lumber of Timmins.

Those 22 township contain almost all of the crown land wood. The wood contractors will lose their most important supply.

I am not against giving enough wood to Mallette so that he can continue his operations but dont give him every thing, save some for us. We need to work to.

If this project is approve the wood contractor will depend upon Mallette for contract. That will create a dangerous situation for them.

It is impossible to operate a business and realise a profit in dealing with Mallette. They buy the wood from the contractor at a price too low.

We, wood contractor have to cut, according to the Ministry of Natural Ressources policy, the poplar as we are cutting the soft wood. In our area it is hard to sell that poplar except for Mallette, and if a wood contractor sell his wood somewhere else, Mallette will refuse to buy his poplar. Therefore most wood contractor are stuck with Mallette and are in financial trouble.

I have look everywhere to sell my Poplar and I did it dealing with companies such as Normick, Tremblec, Ontario Paper and Spruce Falls. Even with Transportation cost considerably higher compare to the contractor selling to Mallette, it was still more profitable. I was therefore independant enough to sell my softwood to other company to a much better price, mostly to Abitibi-Price. It was more profitable even with that higher transportation cost.

There is a certain amount of wood to cut on Patented claims and Veterans lots but in obtaining those 22 township, Mallette would control acces road to these places which means potential problems for independant contractor.

Wood contractor are economically important for our region. It is important to help them by making sure they have a continuous supply of wood. In our society we try as a general pattern to prevent monopoly and to promote healthy competition, here we have an opportunity to show that.

If this project is approve this mean the end for many wood contractor in the short term. It will be impossible for an independant wood contractor to survive.

Thank you for your attention

Georges E Nadeau

*Georges E Nadeau  
132 Queen  
Timmins, Ont  
P4N 4L6*

*P.S. I want to present this  
memorial in French.*

181 15 1983

15 Janvier 1983

Messieurs,

Mon nom est Georges Nadeau. Je suis contracteur de bois dans la région de Timmins. Je possède un peu de machinerie et j'engage selon la saison de 10 à 25 hommes. Je coupe du bois sur des claims patenté, des lots de vétéran et des terres de la courronne. La plus grande partie du potentiel forestier pour des petitscontracteurs comme moi se trouve sur les terres de la courronne.

Je suis contre le projet de donner 22 cantons à la compagnie Malette de Timmins.

Ces 22 cantons contiennent presque toutes les terres de la courronne où il est possible pour nous de couper du bois. Ainsi les petitscontracteurs se verront couper de leur principale source de travail.

Je ne suis pas contre l'idée de donner assez de bois à Malette pour qu'il continue ses opérations, mais pas tout, laissez nous en à nous aussi.

Si ce projet se concrétise les petitscontracteurs de bois dépendraient de Malette pour leurs contrats ce qui créerait un monopole très dangereux pour eux. Il est impossible de fonctionner ainsi et de survivre financièrement. Les prix et la mesure payé par Malette font qu'il n'est absolument pas rentable de travailler pour eux.

Nous, contracteurs, sommes obligés de couper le tremble en même temps que le bois mou. Il serait assez facile de vendre notre bois mou où on veut et laissé le tremble à Timmins à Malette car il est plus difficile de le vendre, mais cette compagnie à cette politique qu'elle n'achète pas le tremble d'un contracteur si il ne leur envoie pas le bois mou aussi. La plupart des contracteurs se trouvent obligés de vendre tout leur bois à Malette.

J'ai cherché et réussi à vendre mon Tremble à différentes compagnies tel quel Normick, Trembec, Ontario Paper et Spruce Fall avec naturellement des frais de transport beaucoup plus élevés. Ainsi j'ai pu être assez indépendant pour vendre mon bois mou ailleurs, surtout à l'abitibi-Price. Tant que Malette ne changera pas son attitude sur les prix et la mesure il sera impossible de réaliser un profit en leur vendant du bois.

Il y a un petit montant de bois de coupe sur des claims patenté et des lots de vétéran mais en obtenant ces 22 cantons Malette contrôlerait les voix d'accès à ces endroits ce qui peut devenir un problème supplémentaire pour nous.

Les petits contracteurs de bois représentent un apport économique important pour la région et il est primordial de les protéger en leur garantissant une source de bois continu. Il est dans l'esprit de notre société d'empêcher de façon continu les monopoles et de promouvoir la saine compétition, ici nous avons l'opportunité de le démontrer.

Si un tel projet se réalise ce sera la fin pour la plupart d'entre nous à courte échéance. Il sera impossible pour un contracteur indépendant de survivre.

Merci de votre attention,

Georges E Nadeau

*Georges E Nadeau  
132 Queen  
Timmins Ont P4N*

*F. S. Je désire présenter ce memo  
aux français*



7  
Roy of Commission on  
the Northern Environment.

Rec'd

JAN 21 1983

Jan 19, 1983

HS  
168

Chokranie Out.  
Box 102, Polico

I would like to submit further of  
my letter dated Nov. 24<sup>th</sup> 1982 on  
Northern Environment.

If go back to 1919 I used to catch  
speckle trout under the bridges of most all  
the main rivers 203 lb pounders, also  
smaller ones in most of the culverts  
smaller streams between Hearst and  
Grant on the C.N.R.

I was a water boy on an extra gang  
of 70 men on track maintenance.

The area was then known as New  
Ontario written on letters.

Another point I would like to  
point out the natives in those days  
used to feed the trout to the dogs  
and eat the other fish caught in the  
net themselves, because they claimed  
then there was no <sup>native</sup> in the other fish  
than the trout.

Also pretty near every grocery store  
had fresh fish to sell, also on the  
trains in the dining car always was  
lake trout on the menu.

Also taking water at different water  
tanks, between Hearst and Grant, Nakiska  
now, after I had a turn as a  
fireman which in turn was 49 yrs  
service on the C.N.R. after.

2.

A trapper or a section man would give the engineer a string of trout on a alder hook, even at 2 AM. Because it was something to talk to the engineer and watch him oil up while the fireman was taking water.

The good old steam days.  
It also remember the tourist trade. Those days, the tourist, mostly doctors, business men, well to do, but were all fly fishermen, hooking on to a 6 or 8 lb speckle trout on a 3 1/2 oz fly rod was really something.

But guides were a special breed they had to be able to pack and pole a canoe up the rapids, the tourist would sit in the bow, only paddle in calm water if he wanted to, no motors then, they appeared in the late 20's.

From memory the trapper could catch all the beaver out of a beaver house, no restrictions those days, there were no trappers, also more fish.

Then came restriction on only 2 or 3 beaver out of each beaver house, also from memory the game & fisheries dept. transported beaver from one location or area to another I believe it was in the early 30's.

In 1940's came the highway from Ketchikan to Angoon. Then came the fishermen and more beaver, also a few dry spells. Now this is my experience from many canoe

trips, also walking river beds in the dry season, I would come on to pools of dead water no in-let, or out-let, dry rapids, there would be lots of trout in these pools. shallow, 1 to 1 1/2 foot of water. and some shallower. The bear, otter, mink would really <sup>clean</sup> these pools out before rain for outlet. I

Now to get to the important part most of the tributaries creeks, streams running into the main arteries would be blocked by many beaver dams, which in turn would lock the fish in, also no in or out passage. This would mean if some of the spawning ~~beds~~ were there before the beaver that would mean another spawning run cut off. so ~~when~~ you add them all up into the hundreds you will learn why the trout are disappearing more & more every year.

Also the damage by flooded areas caused by beaver dams, trees die and water ~~levels~~ the normal water levels in the main streams dry up sooner in the dry seasons. This the northern environment that should be given some serious thought and action, this is my experience which is taking place in the James Bay watershed, in the early days there was enough fresh water going in to the southern tip of James Bay to push the salt water back 70 miles.



4. Might be a good idea to check the saltwater in the bay to see if there is any change.
- Maybe it could be of some help in solving some of these environmental problems.
- Also I would like to say something about the Forestry Harvesting as it is called.
- In Finland there is no underbrush also the scalars even scale the branches of course its a smaller country than the province of Ontario.
- Also the best thing ever happened North Eastern Ontario is the Detour Lake gold & Copper discovery, need more of them. If Texas Gulf wasn't lucky in their drilling Timmins would of been a closed ghost town.
- Don't tie up the prospector in area such as forming parks tourist area etc. The prospector played one of the key rolls in opening up Canada.
- When I look at TV, and see how dry the ground is in Africa, and the starvation and the immigration taking place in Canada it wont happen in my time I don't think as we say our west is the bread basket of the world Northern Ontario some day will be the food basket of the world. The soil and rocks is just waiting for some one to take over.



to improve the tourist trade  
for all concerned between Cochrane  
and Fort Hope would be for the  
speckle trout to reappear in  
many places.

Maybe it would help to cut down  
on the daily limit for a few years  
to give the fish a chance to increase.  
After the water has found its  
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White fish stay in lakes but also  
spawn in rapids of its tributaries.  
Same goes for Pickeral also.

To study and bring back the  
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work, also bring more money  
into the country.  
This would be a good start for  
future development.

Another point what makes sense  
I overlooked mentioning the  
weather.

Get back to the 1920's 30's 40's.  
The winters were colder longer  
and more snow.

The summers in 1950's 60 70's 80's  
are longer and warmer.

The spring run offs are less, does  
make change also in the water  
levels.

There are more severe snow storms south than in Northern Ontario in the average so as I say

The world food basket could be a more reality in years to come. Just another plug that does improve the Northern Environment.

As my memory <sup>and hearing</sup> is not too good verbally exposing my ideas in public, I'll only submit my ideas and experiences in writing.

But this is what I think of Northern Ontario.

Thank you,

Ph No

705.272-4973.

Yours Truly  
Ty Raudat.

Typed from Original

HS 168

Jan. 19, 1983  
Cochrane, Ontario  
Box 102. POL 1C0

Royal Commission on  
the Northern Environment

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Another point I would like to point out, the natives in those days used to feed the trout to the dogs and eat the other fish caught in the net them selves, because they claimed then there was more nourishment in the other fish than the trout.

Also pretty near every grocery store had fresh fish to sell, also on the trains in the dining car always was lake trout on the menu.

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But this is what I think of Northern Ontario.

Thank you,

Yours Truly  
Ty Randa.

Ph No  
705.272-4973.



CA 2 QW  
Z 11  
17-1-83  
Moosonee, Ontario  
POL 1Y0  
January 20th, 1983

Rec'd JAN 25 1983

HS  
169

Mr. E. Fahlgran  
Chairman  
Royal Commission on the Northern  
Environment  
261 Third Avenue  
TIMMINS, Ontario  
P4N 1E2

Dear Sir

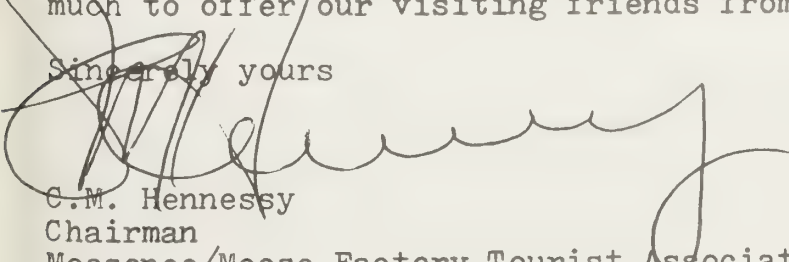
The Royal Commission on the Northern Environment is rapidly coming to a close. In 1978 our local Board of Trade presented a brief outlining our concept of development north of fifty. I would like to support this report and ask you to once again review it.

Moosonee and Moose Factory have but one industry. It is the second largest industry in the province of Ontario and that is tourism. It is barely tapped north of fifty. Tourism in the north encompasses all of the following - hunting, fishing, the history of our area and of its people, our northern way of life and our unspoiled wilderness both in summer and in winter. The remoteness, the isolation and the wilderness only enhance the area to the tourist, especially so to those travelling from the United States. The tourist industry has tremendous potential to all northerners who will make the effort to develop it. Of course, for what point, if you allow our wilderness to be ravaged by uncontrolled development of natural resources.

We also realize that the natural resources of the north must and will be developed. This development must be carried out in such a way as to preserve a very valuable way of life; that of all the people of the north; the Indian, the Metis and the White. We are all northerners and are happy to have the privilege of calling this land home.

We are asking that you protect our wilderness, our people and our way of life. Tourism is an industry in which all northerners have special skills. We are comfortable with tourism. We have much to offer our visiting friends from the south.

Sincerely yours



C.M. Hennessey  
Chairman  
Moosonee/Moose Factory Tourist Association

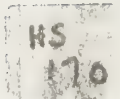
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Rec'd Jan. 28/83



CANADIAN WILDLIFE FEDERATION / LA FEDERATION CANADIENNE DE LA FAUNE

A Brief Prepared For The  
Ontario Royal Commission On The Northern Environment

By The  
Canadian Wildlife Federation  
January, 1983

Submitted by:  
Kenneth A. Brynaert  
Executive Vice President

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# ONTARIO ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

## Brief Submitted by the Canadian Wildlife Federation

### Introduction

The Canadian Wildlife Federation (CWF) is a national, non-profit, non-governmental, conservation organization representing over 500,000 members and supporters across Canada. CWF membership includes the ten provincial wildlife federations, and is affiliated with the International Bird Preservation Society. We are a voting member of the International Union for the Conservation of Nature and Natural Resources (IUCN) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

CWF is administered by a voluntary 38 person Board of Directors who are elected each year at our Annual Meeting. The Federation was founded in 1961 at the "Resources for Tomorrow" conference and received its charter and charitable status the following year.

The Federation is dedicated to the principle that renewable natural resources are economic, social, recreational

and aesthetic assets, which must be wisely used, restored where necessary, and conserved in perpetuity. Our purpose is to promote an awareness and understanding of Canada's natural resources to ensure that stocks of all wildlife species are maintained at sustainable levels so they may be readily available for the use and enjoyment of all Canadians. Our primary goal is to secure the protection, conservation and effective management of Canada's renewable natural resources.

The Federation maintains a substantial program of information, education and research based on ecological principles. CWF co-operates with organizations having similar aims and objectives and with government agencies whose responsibilities may have a bearing on the achievement of our goals. Federal and provincial governments actively seek CWF participation in national policy matters and decisions affecting the future of wildlife resources.

Northern Ontario - North of 50 Degrees:

The Canadian Wildlife Federation does not, as a general rule, become involved directly in matters of a purely



provincial nature, except in support of our affiliates, or where the issues have national connotations contrary to our accepted principles. The Royal Commission's study of the "Northern Environment" is essentially one of those areas which may best be categorized as provincial. There are, however, some elements of the study which have a potential for broader implications.

CWF is aware that, with minor exceptions, most of the area north of 50 degrees is occupied by Indian people located in several communities throughout the region. We are also aware of the growing pressure from Indian people to secure more influence over the decisions which affect their part of the Province. In many respects CWF tends to appreciate their ambitions and expectations, however, there are some qualifications which must be considered in reviewing these demands. Our comments are directed to those issues.

The activities of Indian organizations to secure greater social, political and economic influence is not confined solely to the Province of Ontario. This activity is national in scope and in many instances has implications for all Canadians, and particularly in reference to wildlife

resources and their future management. In response to concerns arising out of native land claims and related issues, CWF has prepared papers which may be of some value to the Commissioners in their deliberations on Northern Ontario.

These include: "Native Rights Related to Natural Resource Use and Management", a paper presented to a symposium sponsored by the Canadian Society of Environmental Biologists. Complete transactions of the symposium are attached and provide a wide spectrum of thought on the subject. Also attached is a copy of a brief submitted to the Hon. J.C. Munro on July 14, 1981, entitled "Brief on the Native Use of Wildlife".

Integrated Resource Management:

Over the past three years, CWF in concert with federal and provincial government representatives, and other non-government organizations, have laboured to prepare a concise statement of principles that would serve to guide the formulation of wildlife policy in Canada. The attached document -

"Guidelines for Wildlife Policy in Canada" - was approved by the Wildlife Ministers' Conference in September, 1982. The guidelines may prove useful in formulating policy recommendations.

Arising out of the policy guideline discussions, interest was generated in coming to grips with the question of integrated forest and wildlife management. CWF was subsequently invited to submit a brief to the "Nova Scotia Royal Commission on Forestry" centred on the thesis of this subject. The attached paper is a copy of the CWF brief which generated a great deal of interest in the press and led to considerable discussion between industry and professional foresters. Much of what is said in our brief has application to Northern Ontario.

Fisheries Agreement:

The Federation is shocked by the Fisheries Agreement, which was recently developed and signed by the Province of Ontario and various Indian organizations in Northern Ontario. We note the agreement was not signed on behalf of the federal government. Although at this point we have not had

an opportunity to review the final document, its content has been made known to us by several sources.

There is a strong indication the agreement may be in conflict with the Constitution, particularly in regard to the transfer of jurisdiction for fisheries, which we assume can only be done by legislation. Moreover there is the question of extending exclusive use of these resources to one segment of the population which, to say the least, is discriminatory.

Provisions had been made, under respective Fishery Regulations, for Indian fisheries in virtually every province except Ontario. These concessions were made to comply with the provisions of Indian treaties, under guidelines arrived at through a great deal of discussion and consideration. The present move by Ontario appears to constitute a retreat from previous policy, and substantially exceeds the guidelines established in other provinces.

The policy guidelines that have applied generally across Canada are as follows:



1. The responsibility and authority for the regulation, management and conservation of fish stocks in inland waters rests with the Province, within the legislative framework of the Federal Fisheries Act. No part of this responsibility and authority may be delegated.
2. The Fisheries Act, and Special Fishery Regulations made thereunder, as Federal Legislation, are applicable to Indians and Inuit throughout Canada, including Indian reserves, except to the extent that specific provision is made in the Regulations for exemptions, or for special Indian fisheries.
3. Indians engaged in commercial fishing activities are required to obtain a license and observe all pertinent fishery regulations, seasons and quotas, which apply to all other commercial fishermen, however, Indians may be granted prior right of access to some commercial fisheries, located in isolated or remote areas, contiguous to their place of residence (primarily northern lakes),

where opportunities for other employment are limited or non-existent.

4. Indians and Inuit, who are permitted under the regulations to engage in domestic fishing activities must observe the condition prescribed for those operations including, number, length, depth, and mesh size of nets; seasons and periods when fishing is permitted or forbidden; total volume or number of fish permitted, per season, or fresh fish in possession. (The latter is common on the Prairies).
5. Fish taken in an Indian domestic fishery are for the sole use of the individuals and their families and may not be sold, traded or bartered or offered for sale or barter at any time, however, under special permits community fisheries may be approved for the purpose of storing fish for winter use, or for dog feed.

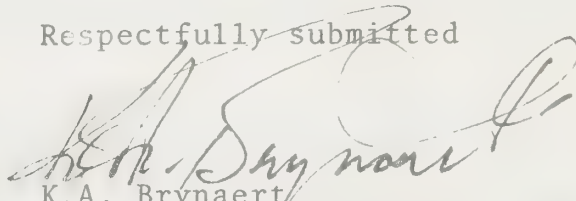
It is the expressed view of CWF that Ontario would have done well to adopt these guidelines in the interest of fisheries conservation and in acknowledgement of the interests of non-native people in Ontario.

Conclusion:

The Federation has submitted this brief for the purpose of providing the attached documents which we hope will make a useful contribution to the work of the Commission. We have a genuine interest in conserving our renewable natural resources for the use and benefit of all Canadians now and in the future. CWF supports the involvement and participation of Indian people in the formulation of policies and decisions which affect them and their part of the Province of Ontario. However, that process must occur in concert with other Ontario residents, with full recognition and respect for their interests, not in isolation.

In conclusion it is appropriate to note that freedom can only be fully exercised in a society which recognizes the constraints which that freedom imposes, and that independence comes only from the full knowledge of our interdependence.

Respectfully submitted



K.A. Brynaert  
Executive Vice President

KAB/jg

CANADIAN WILDLIFE FEDERATION POSITION ON THE NATIVE USE OF WILDLIFE

PRESENTED TO HON. JOHN MUNRO - JULY 14, 1981

The Canadian Wildlife Federation has examined a number of problems involving the native use of wildlife and has studied the implications for management posed by the present policy of open-access to these resources by native people. At this time, this policy does not provide for the regulated harvest of wildlife by native people. Therefore, any management regime designed to perpetuate species or stocks of wildlife in perpetuity, that involve wildlife taken indiscriminately by native people, is meaningless.

The Canadian Wildlife Federation is of the opinion that a fundamental change in this policy must occur in Canada if we are to ensure the preservation, conservation and effective management of our wildlife resources. This change in policy must be translated into federal legislation which is intended to regulate the native hunting economy. These regulations must be based on contemporary conservation principles and management requirements.

Problems involving the native use of wildlife are evident in virtually every province and territory in Canada. These problems include the proposed amendment to the Migratory Birds Convention, Atlantic Salmon Management, caribou management in the Keewatin and the Yukon, beluga and narwhale management in the Eastern Arctic, bowhead whaling in the Beaufort Sea, and salmon fishing in British



Columbia. Some native people who participate in unacceptable and wasteful harvesting practices have indicated an apparent lack of concern for the impact of their activities on the wildlife resources being exploited. There is also every indication that commercial incentives are responsible for the excess harvesting activities of some native people.

We support the native use of wildlife to provide for their essential nutritional needs. We also support the controlled commercial use of these resources by native people on the condition that native commercial enterprises are licenced, monitored and approved by the respective resource management agency. However, the Canadian Wildlife Federation wants assurance that native resource use is consistent with contemporary conservation practices and management requirements and that it does not involve abuse, waste or depletion of wildlife resources.

This Federation subscribes to the active participation and involvement of native people in the conservation and management of wildlife. Common sense dictates that it is imperative for all groups, especially the native population, who are conscientiously involved in harvesting wildlife for their livelihood, to be actively involved in this process. However, respective governments must continue to exercise full control over the management responsibility for wildlife to ensure that all species and stocks of wildlife are properly conserved and maintained in perpetuity for the benefit of all sectors of society. This is especially important for those who are dependent on wildlife for their essential nutritional needs.

Proposals that would transfer, to native communities or native political entities, the responsibility and authority for wildlife management, and that would extend to them prior and exclusive harvesting rights, in perpetuity (as contained in the COPE agreement in principle) are not acceptable concepts. The Canadian Wildlife Federation strongly objects to any such move and is prepared to challenge

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these concepts in the courts, if necessary. Where it is considered essential, or proper, prior right of access for the purpose of harvesting fish and wildlife should be extended for specified periods, on specified areas, by means of appropriate legislation only, and be subject at all times to applicable conservation and management regulations. There must be no options to these principles.

Regulations required for the preservation, protection, conservation and management of fish and wildlife resources must be made fully applicable to all users of wildlife resources, including Indians, Inuit and other native people, notwithstanding the extent to which these resources may be required for subsistence. Recognition must be given to the fact that fish and wildlife resources, even when harvested solely by native people, still require proper and efficient management, based on sound biological data, and that indiscriminate user activities will seriously impair these valuable resources.

The Federation contends that where, for conservation and management purposes, it is necessary to curtail the harvest of any fish or wildlife species and, where such curtailment creates a hardship for the native people concerned, the government must take appropriate action to relieve any social or economic problems without further jeopardizing the resources concerned.

Many native people have become integrated into Canadian society, to a greater or lesser extent, often living in a totally urban environment. They are dependent on wage employment and business or professional incomes, rather than subsisting off the land. The traditional hunting grounds of many Indian bands must now be classed as developed land, much of it now in private ownership. These facts can no longer be ignored in the formulation of policies related to the native use of wildlife.

The legal problems pertaining to native hunting and the use of wildlife remain complex, but they are not insurmountable. The Canadian Wildlife Federation asserts that it is imperative for federal, provincial and territorial governments and native authorities to make a concerted joint effort to resolve these problems as soon as possible. It is important for Canadians to be kept fully informed of these negotiations and for governments to cease dealing with native people in isolation of other public interests. Wildlife must not be used as barter to secure access to other resource concessions.

GUIDELINES FOR WILDLIFE POLICY IN CANADA

30 SEPTEMBER 1982



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## PREFACE

Wildlife is a great Canadian heritage, yet too little has been done to ensure that it always will be. One reason for that may be the lack of guidelines for the development of wildlife policy in Canada. This paper had its genesis at the 44th Federal-Provincial Wildlife Conference in 1980, where the issues to be addressed were defined. The text has been developed through the cooperative participation of conservation organizations with the territorial, provincial and federal governments, and it is being published on behalf of the wildlife ministers of those governments.

These guidelines form a framework within which government and non-government organizations can develop their own policies and programs, and a statement of the general direction in which wildlife conservation should move in the next decade. By approving these guidelines, governments have agreed to the goals, principles and elements. In addition, they have agreed to consider implementing, where appropriate and consistent with provincial, territorial or federal policies, the actions listed under each element. An evaluation of the guidelines will be made by the Federal-Provincial Wildlife Conference after five years.

While most of the proposals in this paper will need government action, they are widely supported by individuals and organizations and will require their active participation to take effect. Wildlife conservation in Canada is and should remain a close partnership between citizens and their governments.

## INTRODUCTION

Most Canadians feel that wildlife is important to them, at the very least as a symbol of a desirable quality of life or, more specifically, for the recreational opportunities, economic benefits and pleasure that wildlife provides. The use of wildlife by Canadians is no small matter. Economic activity related to wildlife, as the term has been traditionally used, has been valued at over \$7 billion<sup>1</sup> for 1977. That figure takes account of expenditures associated with hunting, fishing and nature observation, the costs of management and research to government and non-governmental organizations, licence fees, and the value of related investments, sales, wages and wildlife-derived food products. Economics apart, the enjoyment of wildlife is widespread and greatly valued. Therefore, Canadians wish to ensure that wildlife will always exist in something like its present diversity and distribution.

Wise management of Canada's wildlife and wildlife habitat is essential if this is to be so, if the resource is to survive and the nation to prosper economically and spiritually.

The management of wildlife, which is aimed at sustaining wildlife for its own sake and for human benefit, is a complex matter. It needs to be based on a thorough knowledge of the species concerned, their habitats and their ecological relationships. The choice of management actions employed also depends upon the goals to be achieved; management actions can include total protection of wildlife species and their habitat in the natural state, as well as manipulation of

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<sup>1</sup> From: Estimated annual economic benefit derived from wildlife.  
Unpublished paper of the Canadian Wildlife Federation. 1981.

habitat and regulation of wildlife use and the mitigation of damage caused by wildlife. Because there are a number of different and sometimes competing ways in which wildlife is enjoyed and used, the art of management is to provide for the most broadly acceptable mix of activities, taking account of the variety of Canadian cultural and traditional values and of the paramount need to conserve the resource for the future.

Although management is dependent upon scientific information, it also requires a strategic framework. Its goals, guiding principles and major elements must reflect a political determination of what is to be achieved, by what means and at what cost. Such a framework, broadly accepted by all responsible agencies and organizations, can help to make management consistent and effective.

This document provides direction for the development of wildlife policies and programs in the future. It expresses the will of Canadians to manage wildlife for the use and enjoyment of present and succeeding generations. It provides broad guidelines for activities aimed at achieving that goal, to be used by the Government of Canada and the governments of the provinces and territories as well as by non-government organizations and private enterprises.



### THE CONCEPT

No form of life exists in isolation. All require nutrients, water, air, shelter and space, and have specific tolerances related to factors such as temperature, humidity, sunlight and the presence of toxic substances. The distribution, abundance and welfare of each species is determined by the extent to which these requirements are met, and by the abundance and distribution of other species with which they are ecologically linked.

The basic needs of wildlife are similar to those of man. Wildlife species thrive in a clean and productive environment; a polluted or degraded environment places their survival at risk. The same is true for man. Indeed, the status of wildlife populations can be a useful indicator of the quality of the human environment. There is a unity and an interdependence among man, living resources and the environmental elements of soil, water and air. The development and management of any one resource will contribute to the well-being of man in the long term only if it is planned and undertaken while recognizing the goals and requirements for development and management of each of the other resources. In short, land and living resources, including wildlife, require conservation if their contributions to human welfare are to continue. Their effective development and management require a coordinated, ecological approach.

Wildlife policy must also be related to changing social and economic conditions. The demand for wildlife is rising rapidly while habitat is shrinking or being altered because of man-induced change. The loss or change of habitats, particularly in southern Canada, has reduced the abundance, diversity and distribution of many wildlife species. But changes in habitat resulting from agriculture and the industrial use of Crown lands, for example, for forestry and fossil fuel production, can often benefit some species of wildlife when

techniques of habitat improvement and innovative strategies for development are adopted. Indeed, development, when carefully planned, can often contribute to the maintenance or enhancement of wildlife populations.

Conflicts of interest over the use and value of wildlife among hunters, trappers, people dependant on wildlife for their livelihood, bird watchers, photographers, hikers, farmers, foresters, developers and others have not been resolved. There are local and regional shortages of wildlife and the cost of maintaining wildlife and its habitat is going up as demands for land and resource-based products rise. It is becoming increasingly difficult to meet the variety and extent of demands for wildlife. On the other hand, management actions may be needed to deal with wildlife that becomes a nuisance. Implementing wildlife policies will help resolve conflicts and facilitate planning in all jurisdictions.

The Guidelines for Wildlife Policy in Canada draw upon the World Conservation Strategy of 1980<sup>1</sup>, which has had broad support from leaders of governments around the world. The guidelines emphasize an ecological approach; they call for coordinating the management of wildlife with the management of other resources; they take account of social and economic factors, and propose goals to which all responsible bodies should subscribe. There are three broad goals: (1) to safeguard the ecosystems upon which all life depends, (2) to preserve the diversity of species, which enables ecosystems to function and which Canadians use and enjoy, and (3) to ensure that the enjoyment and use of wildlife is sustainable.

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<sup>1</sup> World Conservation Strategy, prepared by the International Union for Conservation of Nature and Natural Resources with the support of the United Nations Environment Program and the World Wildlife Fund.

An important element of the guidelines is the extension of the concept of wildlife to include habitat, thus reflecting the interdependence of all living things, and the extension of policies and laws to allow the recognition or protection of any wild animals that need it, reflecting the growing interest of Canadians in species other than those which are hunted, fished or commercially exploited. The proposals for the management of wildlife do not conflict significantly with policies governing the use of commercially exploited species, but the management of many important species of wild animals and plants, notably the fish that are caught for commerce and the trees that are the basis of the forest industry, falls under the mandate of agencies other than those responsible for wildlife. It is not proposed that those arrangements be changed; it is proposed that arrangements be made so that conservation measures may be taken for the many animal species and their habitats for which responsibility has not been clearly assigned, and so that the management of wildlife may be integrated with the management of its habitat.

The guidelines recognize that effective management of wildlife is inseparable from management of land and other resources and therefore call for consultative mechanisms to enable integrated management of all resources. They stress the importance of promoting conservation practices by private individuals and corporations. Better planning and coordination of research is proposed to improve the basis of wildlife management at the least possible cost.

The guidelines reinforce the continuing importance of the traditional pillars of wildlife management, maintaining habitat and regulating the use of wildlife; they also emphasize the value of establishing regional targets for the abundance, diversity and distribution of wildlife species. Because ecosystems may be disrupted by the introduction of exotic species of plants and animals, it is proposed that such introductions be carefully controlled.

Two important principles incorporated in the guidelines are related to the use of wildlife. The first is that all Canadians are free to use and enjoy wildlife, subject to laws; the second is that maintenance of wildlife populations must take precedence over their use.

Finally, the guidelines promote international action to conserve those species Canada shares with other countries and the world's heritage of wildlife.

To implement wildlife policies in Canada will require the collaboration of all levels of government and concerned individuals, private corporations and organizations. Cooperative relationships among governments should be strengthened and supplemented by new arrangements between governments and others, designed to take advantage of the skills, resources and opportunities available to corporations and individuals. Governments should take the lead in implementing policies by working out well-planned and coordinated programs to maintain wildlife populations and rationalize their use. This would help to secure rural economies and enhance the quality of life for all Canadians. The cost of such programs, which would yield broadly enjoyed benefits, will need broadly based support.

If the programs developed from wildlife policies are to succeed, they will need a continuous input of innovative thinking, well-planned research and hard work. Nor can the programs achieve their goals without strong public support. Canadians must also do their part as individuals by respecting wildlife laws and regulations and by using wildlife without abuse or waste or damage to the environment. To engender public respect for the land and the wildlife it supports is perhaps the most important task of all.



### GOALS

Because of the interdependence among living resources and the elements of the environment, the goals of wildlife policy must be comprehensive and fundamental:

To maintain the ecosystems upon which wildlife and people depend.

All life depends upon ecological processes such as the cycling of nutrients in soil, water, plants and animals, the natural transport and regeneration of soils, and the fertilization and cleansing of waters. If ecological processes are impeded by careless human intervention, wildlife and human life will be correspondingly limited. These essential processes take place within ecosystems such as the boreal forests, short-grass prairies and coastal estuaries, which may be termed "life-support systems" or considered as wildlife habitats. Wildlife is an integral component of the ecosystems within which Canadians sustain and enhance their lives.

To preserve the genetic diversity of wildlife.

The many species of wildlife found in Canada add diversity to the living landscape that Canadians enjoy, provide a broad base of resources for recreational and economic activities, and, most importantly, form the vital links in ecosystems.

To ensure that the enjoyment and use of wildlife is sustainable.

Wildlife species are of vital importance to many Canadian communities, notably as a source of food and fur. The extensive tourist and recreational industry depends to a significant extent upon wildlife. Significant reduction in the numbers or distribution of some species

of wildlife would cause direct and potentially permanent losses to lifestyles and to the economy. The maintenance of wildlife stocks must, therefore, take precedence over any particular human use from time to time.

### GUIDING PRINCIPLES

The adoption of guidelines for wildlife policy in Canada is a new step, but the elements of wildlife policy and relevant aspects of resources policy have long been the subject of serious consideration. Principles which have emerged from that process and certain basic principles of Canadian society need to be re-stated so that, together with the goals stated above, they may form the essential framework of wildlife policy.

Such principles are:

1. Wildlife is an integral component of the environment within which Canadians sustain and enhance their lives.
2. The way in which land is managed determines the quality and quantity of habitat upon which wildlife depends.
3. The maintenance of viable natural wildlife stocks always takes precedence over their use.
4. Canadians are the temporary custodians, not the owners, of their wildlife heritage.
5. Canadians are free to enjoy and use wildlife in Canada, subject to laws aimed at securing its sustainable enjoyment and use.
6. The cost of management essential to preserving viable populations of wildlife should be borne by all Canadians; special management measures required to permit intensive uses should be supported by the users.

7. Wildlife has intrinsic, social and economic values, but wildlife sometimes causes problems that require management.
8. Conservation of wildlife relies upon a well-informed public.



## ELEMENTS AND ACTIONS TO CONSIDER

### 1. Adopt a broad concept of wildlife to include habitat.

Nowhere in Canada is responsibility sufficiently comprehensive to take into account the plants and invertebrate animals that now require management but, for lack of an appropriate mandate, are now generally ignored. In addition, variation among jurisdictions in the definitions of wildlife currently used causes problems in law enforcement. Also, the dependance of wildlife on its habitat is often not reflected in laws authorizing wildlife management. Therefore, governments should extend their policies and laws accordingly.

#### *Actions to consider:*

- (a) ensure that policies and laws allow for the conservation of any wild animals and their habitats.*
- (b) adopt a definition of wildlife that can include any species of wild animals.*
- (c) provide a basis in law for the integrated management of wildlife with wildlife habitat.*

### 2. Adopt comprehensive conservation policies.

Current resource management policies tend to be oriented towards a single purpose. Taking ecological factors into consideration, either when attempting to solve resource use problems or to facilitate comprehensive land use planning, is a complex matter. Often environmental assessments are only considered after commitments have been made to projects; this allows mitigation but does not allow initial planning for measures to enhance wildlife. All conservation agencies must address coordination in resource and land use planning within governments, among the different levels of government, and

between the public and private sectors. Without such coordination, comprehensive and effective conservation of wildlife is very difficult. Therefore, governments should ensure effective wildlife management by reviewing, strengthening and adopting comprehensive conservation policies and procedures.

*Actions to consider:*

- (a) proclaim a commitment to the sustainable use of renewable resources, including wildlife, by reflecting conservation goals in legislation.*
- (b) assess and refine policies which directly influence land use and wildlife habitat.*
- (c) establish permanent mechanisms for joint consultation which would permit a multi-agency approach both to defining objectives and to managing programs for the conservation and effective management of air, soil, water and living resources.*
- (d) clarify the conservation mandates and responsibilities of the many agencies whose work directly or indirectly affects conservation.*
- (e) include consideration of consequences of development proposals when formulating resource policy.*

3. Involve the private sector.

Greater involvement in conservation on the part of non-government organizations, private corporations and individuals would add substantially to the support for conservation. It would improve the exchange of information between the public and private sectors, and

facilitate coordination of publicly and privately funded activities. It would also help to resolve the difficulties that arise from the paradox of public stewardship of wildlife that depends upon habitat that is often privately owned. Therefore, governments should energetically promote cooperative wildlife efforts, the principle of stewardship of resources, and the adoption of conservation practices by private landowners and persons licensed to use public lands.

*Actions to consider:*

- (a) promote and assist wildlife projects involving private citizens, organizations and business.*
- (b) motivate landowners and land users to participate in wildlife management by developing cooperative programs that increase the benefits from wildlife and alleviate problems caused by wildlife.*
- (c) develop effective information, education and extension programs.*
- (d) ensure adequate provision for the involvement of local communities, as well as other interests, in the wildlife aspects of resource management and land-use planning.*
- (e) require that assessments of the effects on the environment of development projects coincide with engineering and socio-economic studies at the earliest stage and throughout the development-planning process.*

#### 4. Improve the basis of wildlife management.

To meet the challenge of human population growth and the increasing demand to use and enjoy wildlife, the art and science of wildlife management must itself evolve and improve. Many of the gaps in our knowledge of wildlife populations and their behaviour and requirements must be filled, more knowledge of the characteristics and aspirations of the users of wildlife must be obtained, and the social and economic values of wildlife must be more clearly and comprehensively defined.

##### *Actions to consider:*

- (a) *conduct base-line surveys and monitor the status of key species of wildlife.*
- (b) *coordinate the planning and increase the scale of research while directing research to species in which public interest is growing.*
- (c) *give priority to research that will provide the information needed to plan development with minimum detriment to wildlife and wildlife habitat.*
- (d) *determine on a regular basis the cultural and economic values of, and the demand for, wildlife in order better to plan, allocate and manage the use of land, water and other resources.*

#### 5. Ensure maintenance of wildlife habitat.

Maintenance of habitat is the key to the continued abundance of wildlife, yet increases in human populations in Canada lead both to a decline in the extent and quality of wildlife habitat and to an increase in the demand for wildlife. Therefore, governments should plan and implement comprehensive programs to maintain the diversity and



distribution of wildlife habitats within major ecosystems in Canada. Such programs should have information-gathering, planning and action phases.

*Actions to consider:*

- (a) *assess the capability of habitats to support wildlife, including the identification of existing constraints.*
- (b) *assess the capacity of habitats to respond to changing land uses.*
- (c) *formulate regional goals and objectives for the maintenance of wildlife habitat, particularly as inputs to land-use planning.*
- (d) *conduct periodic surveys of the extent and quality of habitat to determine gains and losses.*
- (e) *adopt measures to ensure that the use of ecosystems does not reduce their potential productive capacity so as to retain a maximum latitude for choice in making future decisions on land use and development.*
- (f) *control the discharge of pollutants to minimize damage to habitat.*
- (g) *establish systems of protected areas that include representative ecological types, giving priority to the protection of unusual habitats of limited extent, such as estuaries and old-age timber stands.*
- (h) *conclude agreements between government agencies and with private corporations aimed at improving and extending wildlife habitat by integrating wildlife management with -*

*i) agriculture*

- plan multiple-use strategies for certain ecosystems (e.g., grazing lands, wetlands)
- experiment with game ranching<sup>1</sup> as an alternative to the use of land by domestic species.

*ii) forestry*

- harmonize forestry and wildlife objectives for forest lands and plan cutting and reforestation programs accordingly.

*iii) energy and mining*

- plan multiple-use strategies for lands altered by mining, seismic survey lines, roads, hydro-reservoirs, and other activities.

*iv) urban and recreation development*

- plan to maximize wildlife benefits and to minimize both risks to human safety and damage to property caused by wildlife.

## 6. Protect the genetic structure of Canadian ecosystems.

Ecosystems reflect the adjustments of species to their environments over long periods of time. Many Canadian ecosystems have been severely damaged by the introduction of exotic species of

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<sup>1</sup> Game ranching is the production of wildlife for consumptive use by maximizing the carrying capacity of the range and the productivity of the species.

plants and animals. In only a very few instances have the long-term benefits outweighed the costs. Therefore, governments should ensure that ecosystems within their jurisdictions will evolve in a natural manner and should cooperate with other governments as appropriate.

*Actions to consider:*

- (a) cooperate to limit the deliberate or inadvertent introduction to Canada of exotic species of plants and animals.*
- (b) ensure that the transplanting of plants or animals to new areas within Canada does not adversely affect local wildlife or its habitat.*
- (c) require the consent of the receiving jurisdiction to the export of wild plants or animals.*

7. Maintain optimum wildlife populations.

To meet the demand for use of wildlife requires not only the maintenance of sufficient habitat, but also the regulation of the enjoyment and use of wildlife and, in special cases, the employment of techniques for propagation and re-introduction. Governments should manage wildlife so as to maintain diversity of species broadly distributed throughout their traditional range and at levels of abundance to meet management objectives.

*Actions to consider:*

- (a) establish regional targets for abundance, diversity and distribution.*
- (b) maintain and, as appropriate, extend suitable habitat through incorporating regional targets in regional land-use planning (see Policy Element 5C).*

- (c) *regulate the harvest of wildlife to ensure sustainable yields at levels compatible with established regional targets.*
- (d) *ensure adequate long-term programs, involving the public and private sectors, to reduce adverse effects of certain wildlife populations.*
- (e) *identify special requirements and take special measures for the conservation of rare, threatened and endangered species and habitats.*

8. Increase the benefits from wildlife while ensuring its wise and responsible use.

Wildlife's social and economic benefits are both inadequately recognized and insufficiently developed. Promoting economic and other benefits will increase the public support for conservation.

The taking of wildlife, or activities that disturb wildlife, must be carefully regulated. The legal commitments to native people must be honoured while maintaining viable wildlife populations for the benefit of all Canadians. Further considerations include the subsistence needs of other Canadians and the provision of economic support for rural people. The reasons for regulating and allocating the use of wildlife should be broadly disseminated in order to secure public support. Governments should provide opportunities for use so that the benefits of wildlife may be enjoyed by as many people as possible.

*Actions to consider:*

- (a) *develop ways to use the economic benefits from wildlife to sustain the wildlife resource.*
- (b) *ensure that the benefits of wildlife are enjoyed by as many people as possible, consistent with the maintenance of wildlife populations.*



- (c) *promote responsible and ethical use of wildlife by all users, and enforce and promote the acceptance of conservation laws.*
- (d) *promote activities that develop the recreational and economic benefits associated with wildlife.*
- (e) *promote activities that reflect the amenity value of wildlife.*
- (f) *examine new initiatives in the sale, capture and propagation of wildlife, where the status of stocks permits.*
- (g) *encourage reasonable access by the public to wildlife on private lands and permit such access on Crown lands while protecting the interests of landowners and users of Crown lands, by amending legislation relating to trespass and landowner liability as necessary.*
- (h) *provide access to wildlife as close as possible to centres of human population, by cooperating with municipalities, non-government organizations and landowners.*
- (i) *carry out joint programs between governments and non-government organizations to inform the public of the rationale for conservation laws and regulations.*

#### 9. Participate in international conservation.

Canadians have two reasons for participating in international conservation. First, to ensure the continuing availability of resources which are or could be shared with other countries; and, second, to contribute to the maintenance of mankind's global heritage, by promoting and supporting good land use, care of the environment and the wise use of living resources in other parts of the world.

Therefore, the Government of Canada, which has responsibility for international wildlife matters, should participate in international conservation, cooperating with provinces and territories as appropriate.

*Actions to consider:*

- (a) take part in international programs, mainly bilateral, aimed at assessing stocks, preserving habitat and regulating harvest to ensure sustainable yield of those species that Canada shares with other countries.*
- (b) negotiate reasonable opportunities for Canadians to use stocks of wildlife shared with other countries.*
- (c) support the establishment and enforcement of international conventions aimed at conserving wildlife, particularly migratory species and species which exist in areas beyond national jurisdictions.*
- (d) initiate and support technical assistance programs in developing countries which are aimed at the conservation of wildlife and living resources and at the integration of conservation principles in development planning and projects.*



CANADIAN WILDLIFE FEDERATION / LA FEDERATION CANADIENNE DE LA FAUNE

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"Integration of Forest and Wildlife Management"

Brief Presented To

Nova Scotia Royal Commission on Forestry

By

Canadian Wildlife Federation

November, 1982

Kenneth A. Brynaert  
Executive Vice President

"Integration of Forest and Wildlife Management"  
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Introduction:

The Canadian Wildlife Federation (C.W.F.), founded in 1961, is a national, non-profit, non-government conservation organization, representing over 500,000 members and supporters across Canada. It has a 38 person Board of Directors, comprised of representatives from all provinces and several resource disciplines. Our purpose is to promote an understanding and appreciation of Canada's renewable resources, and to ensure that all species of wildlife are maintained at sustainable levels, so they may be readily available for the use and enjoyment of all Canadians, now and in the future.

Our extensive public education campaigns, speaker/classroom programs, conferences and exhibits heighten public awareness of Canada's wildlife heritage. Consultation and involvement with federal, provincial and other non-government agencies ensures direct public participation in policy and program development. Student resource material, career guidance, and information on financial assistance and scholarships are made readily available by a panel of expert conservationists who ensure dissemination of current and factual information. Periodic reports, editorials, and media briefings provide useful public comment on current affairs. C.W.F. is recognized as



a responsible organization, dedicated to the protection, conservation and effective management of Canada's wildlife resources.

Parameters of the Problem:

C.W.F. has been aware, since its inception, of the importance of habitat in maintaining wildlife at sustainable levels and in retaining species diversity. Good quality habitat and a clean environment are as important to the well being of wildlife as they are to the well being of man. The degradation and modification of wildlife habitat is directly linked to the progress we have achieved in the development of our nation. Industrial, agricultural, urban and forestry development have all progressed dramatically over the past century, largely on the premise that wildlife habitat was expendable, if in fact it was considered at all. We progressed on the assumption that there was more habitat over the hill, seemingly unaware or uncaring that someone else was over the hill labouring under the same delusion. We are only now, in recent years, becoming aware of our folly.

The Honourable John Roberts, Minister of Environment, in a speech to the Nova Scotia Forest Products Association, on January 29, 1982, stated - "The forest resource is Canada's

most valuable endowment: it has more growth potential than any other sector of our economy. But we are abusing it. We have been using our forests without giving anything back and that has got to stop". He was of course speaking about the need for better forest management to achieve improved wood production. What he failed to note was the impact our abuse of the forest has had on other forest values, with particular reference to wildlife.

No one can deny the importance of the forest industry to Canada's economy. Forest products make up 14 per cent of all manufactured goods and, in 1980, Canadian exports of forest products were valued at 12.8 billion dollars. About one million Canadians are employed in the forest products industry, and over 300 communities depend on forestry for their existence. However, the warning is clear, uncontrolled exploitation, with no thought to the future, will lead to serious unemployment, and material shortages, and the effects on our environment may well be irreparable.

We are already facing some of these problems in the forest sector of our economy. Local shortages of timber, within economical transportation distance of existing processing facilities, are already emerging across the country. Until recently, man assumed that nature would replace the trees removed by logging. The crisis facing the forest industry was aptly covered by Roy MacGregor in his

article "Heritage Lost", appearing in Today's Magazine, June 5, 1982. It is evident the serious mismanagement of Canada's forests, over the past several decades, is only now beginning to receive the public scrutiny that it so justly deserves.

The forest industry in Canada has developed over the past two centuries, initially to provide for local needs, and later to utilize surplus timber as an adjunct to clearing land. This was expanded to supply British and European markets, when other sources could not meet the demand. More recent expansion occurred to satisfy North American demand for pulp and paper production and for the construction industry. During this period of our history, management policy had been formulated largely to meet the needs and demands of the forest industry, with minimal regard for the resources. In recent decades, these needs and demands have been oriented to supplying the almost insatiable appetite for more wood, created by the export market, particularly for pulp and paper products.

Forest management policies have been justified on the basis of the forest industry's potential to provide employment, income and other economic benefits. Political leaders have been influenced by this fact, permitting forest operators a

relatively free hand in the management of the resources within their respective timber limits. Inadequate control has been maintained on the level and extent of forest utilization. Extraction has exceeded allowable cutting limits for many years, and it is questionable whether these allowable cutting limits were ever properly ascertained and identified.

It has become abundantly clear that reforestation and natural regeneration of cut-over forest land has been totally inadequate to ensure a continuing wood supply. Reports indicate that most provinces can expect to face serious shortages of harvestable timber within the next decade. Regeneration and growth has not been maintained on a substantial portion of the forest land subject to extraction operations over the past fifty or more years. Rotation and forest succession cycles have been grossly underestimated, as a consequence of short-term and short-sighted forest management policies.

In some areas of the country, the supply of wood from private lands has partially masked the impending shortage of timber from public lands. However, supply problems and the impacts of inadequate management are now beginning to highlight the destruction of forests by insects, fire and disease. These problems, and the consequences of mismanagement, are



now forcing most, if not all, provinces to face the prospect of substantially reduced forest production pending the benefits from more enlightened management. It is likely this situation will continue well into the next century.

C.W.F. is concerned about the impacts on other forest resources, including wildlife, arising from inadequate forest management. Forestry practises have already demonstrated that we face a serious lack of consideration for the conservation and maintenance of wildlife resources. Wildlife management efforts have been hampered and often frustrated by an inability to influence other management practises on public lands. The result has been a general deterioration in wildlife habitat, due in no small measure to policies oriented principally to wood production, that rarely include sufficient regard for other components of the forest ecosystem. It seems we can't see the forest for the trees.

The problem is further compounded by attitudes towards resource management within government itself. Departments charged with responsibility for management and conservation of natural resources are not encouraged to work together. They are separated into independent units (timber, lands, fish, wildlife) each concerned with only one resource. Each unit conducts its own research and development in isolation

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of the others. In the case of forestry and wildlife, the agency which has no responsibility for wildlife is in a position to exercise more influence over wildlife than those agencies that do have that responsibility. If this situation is permitted to continue, the future for wildlife is indeed bleak, but the concept of separate functions is still strong. At a recent conference in Ottawa, the Canadian Forestry Association recommended that "Forestry" be given the distinction of having a separate Minister, to better represent forest industry interests at the federal level. That recommendation is not compatible with improved co-ordination of resource activities.

Telfer and Dauphine (1980) point out in a paper delivered to the 46th North American Wildlife and Natural Resources Conference, that even where the forestry agency's official policy includes the goal of multiple use, the fact is that emphasis is invariably given to the timber resource, while other uses like the production of wildlife receive attention only where they are of spectacular proportion, or are not in conflict with forestry operations. The problem, therefore, may not be simply a lack of policy. The concept of multiple use is already acknowledged. The problem lies in the successful and practical application of that policy, and the great discretionary power over land management that is held by forestry agencies.

It is necessary to acknowledge that some meaningful co-operation does occur between biologists and foresters. In many instances these arrangements are informal, often dictated by the personal interests of individuals. In other instances an effort is made to include provisions for wildlife in forest management plans. An example is the "Forest Management Manual for Crown Lands, 1982", Department of Natural Resources, Province of New Brunswick. However, few provinces specify that foresters must take wildlife habitat needs into account, therefore, the extent to which this occurs often depends largely on how well foresters and wildlife managers work together.

C.W.F. cannot accept the perpetuation of forest management policies and attitudes which ignore other land based values. Nor can we accept the view that wildlife resources are of less consequence to the Canadian economy than that of the forest industry. Wildlife values contribute extensively to the economy of each province, and are estimated nationally to be in the order of \$9.5 billion annually. Much of this value comes from forest lands in the form of recreational benefits, and the goods and services bought or used in the pursuit of these activities. Included are direct commercial benefits, taxes and licence fees, and the value of meat, fish and fur taken by anglers, hunters and trappers. In addition, there are the incomparable aesthetic and spiritual values realized daily by the people of Canada from coast to

coast. We cannot stand idly by and permit these values to be written off as being of limited consequence.

In most provinces, the responsibility for the management of forest lands lies with the forestry agency, and under its jurisdiction, large tracts of Crown land are leased to private industry for timber production. At the present time, the concept of a timber production goal is firmly entrenched in forest management policy and is largely the basis for forest management decisions. For the future, the forest industry must be made fully aware, by the regulatory authority, of its responsibility for the management of forest lands in a manner which gives full recognition to all other forest based resources, including wildlife. This requirement must be made a condition of the forest operators' licence. The deterioration of wildlife habitat, occurring as a consequence of forest extraction operations is largely due to a lack of an incentive to consider other values. Mitigating and remedial measures must become an integral part of forest operations. The knowledge and the technology is available. It is now time to apply it as a normal procedure in the course of forest operations.

The integration of forest and wildlife management policies must be introduced by all relevant government agencies as a priority action. Competent wildlife and



fisheries biologists must be given a full opportunity to work in concert with foresters in the development and implementation of comprehensive management plans. Effective wildlife management requires an integrated approach, regardless of whether reference is made to managed forests in the south or portions of the Boreal Forest region. Wildlife management is the art of manipulating animals or their environment for the purpose of achieving certain pre-determined objectives. If wildlife managers are not in a position to influence or properly determine wildlife needs and habitat requirements in forested areas, meaningful management and research objectives cannot be realistically attained.

The final concern that C.W.F. believes should be addressed is the increasing reliance placed on biocides to solve a variety of problems. Increasingly large tracts of forest land are sprayed, ostensibly to control insect infestations, and we believe, invariably control or eliminate any natural biological controls that may exist. We are now faced with a planned increase in the use of herbicides to control leafy vegetation that competes with conifers. Care is taken to avoid the contamination of people and communities, but what about the effects on wildlife subjected to repeated doses of biocides? The use of biocides and fertilizers by agriculture is reaching the proportions of chemical warfare and we are

now including our forests in this campaign. C.W.F. believes we need to take a long hard look at how this practise will effect our environment in the long term. Surely there must be a better way to deal with silviculture problems, without increasing the chemical load on the environment.

It has become evident that government and the forest industry, in the process of analyzing problems facing the forest sector of our economy, have not afforded other forest-based resources proper consideration in their deliberations. The discussion paper - "A Forest Sector Strategy for Canada", sponsored by the Honourable John Roberts, for example, makes only passing reference to environmental concerns and no direct acknowledgement of wildlife habitat requirements. It seems imperative that provincial governments pursue this oversight in the development of joint forest management agreements, since wildlife falls within provincial jurisdiction.

On the positive side, the Provincial Wildlife Minister's Conference, has adopted "Guidelines for a Wildlife Policy for Canada", emanating from the Federal-Provincial Wildlife Conference. The 46th F.P.W.C., held in Whitehorse, Yukon, June, 1982, also initiated plans to hold a symposium late in 1983, or early 1984, on - "Integrated Forest and Wildlife

Management". The plan calls for foresters and wildlife managers from government, industry and universities, to prepare and present papers which would serve as the guidelines for future integration of forest and wildlife management.

The real test will come when governments, industry and Canadians everywhere, are faced with the reality of formulating policies and legislation which gives substance to the guidelines, and provides for the practical application of integrated management. C.W.F. requests, therefore, that this Commission give serious consideration to supporting the move towards the integration of forest and wildlife management.





P.O. Box 42,  
Red Rock, Ontario.

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Rec'd Jan. 31/83

Mr. Gerry LeSauvage,  
Senior Information Officer,  
Royal Commission on Northern Environment,  
Arthur Square, 215 Red River Road,  
Thunder Bay, Ontario.

Dear Sir:

Thank you for a final opportunity to comment on the Land Use planning for our section of Ontario. As you know, I have submitted suggestions and criticisms on both the Nipigon and Thunder Bay plans; however, I am glad to have the opportunity to reaffirm my original suggestions and perhaps add several more.

Two items not mentioned earlier and ones that I consider important to our north are as follows: First, when hearings on pipeline corridors and water crossings (even hearings on broadcast licensing) are held, they are usually held in Ottawa or Hull where it is virtually impossible for local residents familiar with the areas concerned to have any input with regard to problems that are present or may be encountered.

Secondly, I am becoming concerned with the amount of land that is being taken out of circulation or production by various Hydro and Pipeline corridors. In addition to the existing corridors there are at least four more in the planning stages, 2 Hydro lines from the future Little Jackfish River project, 2 slurry pipelines, a Polar gas line plus an unknown number of twinning projects with the existing gas line. At present and as far as I know, only the timber companies notify the public of their spraying operations. I believe all spraying should be publicized so that the general public is informed and could question the practice if warranted.

As I stated before, I am in favour of very selective timber harvesting in most parks and am very much opposed to the clear cutting of large areas anywhere. I believe this practice is detrimental to fish and wildlife also to the land itself resulting in drying out and erosion in some areas. As a resident of this area since 1937, I have noticed a gradual decline in the amount of water in our creeks, lakes and rivers over the years, almost flash floods in the spring and very little water during the summer. Perhaps there are others who feel as I do that some of this water shortage is due to the vast areas of

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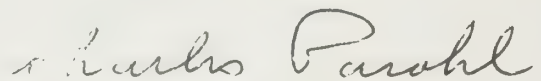
clearcuts allowed by the Ministry of Natural Resources.

I believe the time has come when Timber Companies should be discouraged from further expansions and concentrate their efforts on improving their efficiency for their supply of new timber is rapidly running out and it will be some time before the very late reforestation efforts will be available for harvesting.

I also believe we have a far greater potential for tourist attraction if only the Ministry of Natural Resources would put some of the monies raised through the sale of our natural resources back into the stocking of fish and establishing of realistic game laws. One criticism I have of the Ministries past practise is the removing of all dams from the outlets of lakes used by the timber companies for their log drives. I realize the wooden dams were a potential flood hazard when they deteriorated and suddenly washed away; however, I believe rock retaining dams could have been constructed in the majority of cases thereby maintaining a realistic water level in lakes which would in turn increase the probability of a good fish population for few fish are found in lakes without a shoreline of vegetation.

I believe Agriculture should be encouraged in Northwestern Ontario for there are areas where almost any fruit can be grown or crops harvested if for no other reason than to supply our own needs and to provide more stable employment than some of our resource industries.

Thank you.

A handwritten signature in cursive script that reads "Charles Parohl".

Charles Parohl

Rec'd Jan. 31/83

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S U B M I S S I O N

T O

THE ROYAL COMMISSION ON  
the NORTHERN ENVIRONMENT.

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J.E.J.FAHLGREN

Chairman, Royal Commission  
on the Northern Environment

Introduction

Sir:-

From its inauspicious beginnings in November of 1976 - when the Premier of Ontario proposed a commission of inquiry into the granting to Reed Ltd. of certain timber limits in the last large uncut stand in the province - this proposed inquiry with a more traditional format of examining allegations evolved, in the words of Mr. Justice E.P. Hartt, into a "new breed" of commission investigating all aspects of resource development north of the 50th parallel, a region comprising more than one-half of Ontario's land mass.

As Mr. Justice Hartt explains in his ISSUES REPORT of December 1978, by the time of the Commission's formal establishment in July 1977 under Cabinet Order-in-Council 1900-77, the Commission mandate had been expanded to assess the environmental effects of major enterprises in the north; to recommend methods for their assessment and to examine alternative uses for northern resources. The Order-in Council defined "environment" to include not only natural environment but also the social, economic and cultural conditions influencing the lives of the people in their communities.

It was on this background and with such authority that the then Commissioner Mr. Justice Hartt embarked upon a series of preliminary hearings, at 14 northern locations and in Toronto between November 1977 and February 1978. In the words of the Commissioner:



"...we invited people to have a say in the future of northern Ontario. The response was overwhelming...the Commission received over 450 submissions..."

Both in the Interim Report of April 4, 1978, and in the ISSUES REPORT of December, 1978, Mr. Justice Hartt writes eloquently about the "competing interests", the "conflicting nature of different pursuits", having to do with land use in northern Ontario. The Commissioner mentions recommendations for comprehensive planning involving the people affected to consider and resolve "competitive" claims on resources while preserving the natural environment to a "maximum degree." But the fundamental conflict is only alluded to but not explained. Concerning alienation of the north from the south and in particular the people of the north from the government in power at Queen's Park, he writes:

"...Even if one assumes that such conflicts can today be reconciled in this way, we are talking about a fundamental reassessment of the relationship between government and the market system, necessitating a degree of governmental involvement far greater than that which is currently acceptable."

In Mr. Justice Hartt's April, 1978, preliminary report we find the following three recommendations:

1) that a continuing commission on the northern environment consider the ongoing questions of development north of 50 and how instruments such as the Environmental Assessment Act may be utilized to ensure adequate social and physical planning before development occurs. (emphasis added)

2) that a task force of northern residents be formed by the Commission to encourage dialogue with and among fellow northerners.



In this way, I envisaged the encouraging of voluntary groups and organizations in the discovery of better ways for individuals and communities to relate to the larger public institutions, both governmental and industrial. In addition, the task force would be in a position, as northerners, to consider new standards for the delivery of services to the towns and unorganized communities and districts across northern Ontario.

3) Finally, I recommended a tri-partite body composed of federal, provincial and Indian members to deal with the outstanding and unresolved issues of status Indian people. Due to the unique constitutional position of native people, it is necessary to involve both levels of government in such deliberations. (emphasis added)

What became clear from the early work of the Commission was that a new awareness of the finite character of our northern resources has developed. That timber and mineral ores cannot be forever exploited and carted away without rebuilding renewable resources and that our native people, in particular, feel helpless in the face of what is being done to their environment, their land and its resources.

Mr. Justice E.P.Hartt's acceptance of his appointment as Commissioner, to work with the federal and provincial governments and the Indian people in a decision-oriented tripartite process and known as the Indian Commission of Ontario, put an end to the first phase of the Royal Commission on the Northern Environment.

Thus, what we may call the second phase of this Commission under the Chairmanship of John Edwin Fahlgren began on Aug.2,1978.

Now in its seventh year, this Commission seem to be operating in a political climate of sharpening controversies on many and varied issues of economic, political, social and moral consequence. Any one, or more, of the specific issues confronting this Commission can easily stir up a political storm with strong racial overtones, since the majority of the people north of the 50th parallel of latitude in Ontario happen to be Native people. This is something real that must be faced up to and overcome by tackling it head-on. The current controversy over fishing rights across Ontario proves, that the compelling force behind the quest for capitalist profit is the spark that sets off the storm simmering beneath the surface in our capitalist environment. The roots of this issue are to be found deep in our historical past.

European settlement and capitalist industrialization in Canada were carried through at the expense of its original inhabitants. The Indian, Metis and Inuit peoples were robbed of their lands and herded into reservations. They were denied equal rights of citizenship and of self-government. The oppression of the Indian, Metis and Inuit peoples is continuing to disgrace Canada and must be abolished and the rights of the Native Peoples fully restored. It is the duty of all democratic Canadians to help win recognition of their identities as peoples. The government-ward system must be abolished and they must have full political equality, including the right to decide on all measures relating to their distinctive development.

In place of an official state policy that discriminates against our native peoples we must develop new governmental relations with the Indians, Metis and Inuit peoples. Any and all developments of the North must come through consultation and agreement with the people ~~xxxx~~ concerned.

This can be done on the basis of establishment of genuine Canadian control through public ownership and democratic control of all the resources of the areas concerned.

The Communist Party of Canada supports fully the just demands of Canada's Native Peoples for meaningful settlement of their land and environmental claims.

#### Toward Self-determination for our Native Peoples

The federal and provincial governments, in their negotiations with the Indian, Metis and Inuit peoples, must take as the starting point the right of these peoples to collective ownership of the lands of their forefathers in all areas where no treaty rights exist, as well as where such treaties<sup>do</sup>/exist. The Federal Government and the Ministry of Indian Affairs and Northern Development have not given up their objective of dissolution of Indian reserves. Reserve lands near centres of population are coveted by greedy developers.

Government policy, while moving partially away from a past stance of cold indifference and callous neglect, is based on tokenism and refusal to face up to the real issue -- recognition of the distinct identity of the Indian, Metis and Inuit people as peoples and their rights contingent thereto.

The struggles of the Native Peoples in defence of their identities, rights and economic needs and human dignity will certainly triumph. The most advanced elements among them, particularly those in the labor movement and the young generation, are refusing any longer to accept the intolerable indignities imposed upon them under the colonialist Indian Act.



~~Colonialist Indian Act.~~

The just cause of the Native Peoples will triumph as a result of their own militant struggles in the political arena, both parliamentary and extra-parliamentary, which will take a number of forms including court actions. Decisive in this respect is the forging of a high level of unity within their own ranks and the active support of the broadest sections of democratic Canadians, and above all of the organized labor movement.

While supporting fully the just demands of the Native Peoples The Communist Party stands for:

- . Meaningful compensation for the land and natural wealth the Native Peoples were robbed of in the past;
- . The right of the Indian and Innu't peoples to collective ownership of the lands of their forefathers in all areas where no treaty rights exist and their right to participate in decisions with respect to economic development of their lands and the natural resources thereon and to their rightful share in the income derived from such development programs and projects;
- . Full recognition of their national identity and full rights to their language and culture;
- . All treaty rights to be strictly adhered to, regional self-government with full power of decision-making on all questions pertaining to their affairs as Native Peoples;
- . Massive economic and social programs to bring the Native Peoples living, health, housing and education standards, training and job opportunities up to accepted Canadian standards;
- . Rooting out of all form and practices of racism and discrimination, full equality before the law and in society;
- . Abolition of the government-ward system and revision of the Indian Act in conformity with the wishes of the Indian people.



## People and the Environment

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Damage to the environment and the effects of pollution are today one of the big themes on the agenda which is causing serious concern throughout the world. A couple of examples:

In the late Sixties and early Seventies a new disease named "Minamata" appeared in Japan. The disease was found to attack the central nervous system, causing paralysis of the arms and legs, speech difficulties and loss of sight. Dozens of people were paralyzed or died after eating fish contaminated by mercury waste poured out by a factory in their neighborhood.

Almost at the same period, the Grassy Narrows Indian Reserve in Ontario, Canada, ~~was~~ almost dealt a death blow with the discovery that the English-Wabigoon river system - a source of food, employment and a cultural wellspring - was poisoned by mercury from a Dryden, Ont. paper mill. The paper mill owned by Reed Ltd., was later sold to Great Lakes Paper in 1979, at which time the Ontario Government "agreed to pick up any liability for past pollution in excess of \$15 Million", according to a story by Ken McQueen in the Toronto Globe and Mail on January 12, 1983.

These are <sup>only two/</sup> ~~examples~~ of thousands or millions to be found on a worldwide scale.

In a study called, "The Limits of Growth" drawn up by the Massachusetts <sup>Institute</sup> of Technology on behalf of the Club of Rome, we can read the apocalyptic predictions according to which the world is moving towards a catastrophe and the first fall is predicted for around the year 2,000. In any case before the year 2,100 we must expect a catastrophic fall in the population due to an increase in pollution and the exhaustion of the earth's resources.

In this alleged state of affairs, there are those who wish to hold back progress through some moratorium on development and turning the clock back via a policy of so-called "zero growth".

In reality, the problem is not to hold back the growth of the productive forces, but to ensure their progress by means of efficient and long-term social management in the interests of humanity.

However, such an idea is completely foreign to the big corporate fraternity. Capital has a proprietorial attitude towards nature which is quite devoid of conscience. The race for profits leads to a deformed development of productive forces and to an anarchistic extension of industry to the countryside. Capitalist production, wrote Karl Marx, does not develop technique and combine the social process of production except by undermining at the same time the source of all wealth -- land and the worker.

All the same, there are some fields in which the problem of the environment does not leave the capitalist investor indifferent. The biosphere interests capital to the extent that it is on it that the cost of labor power depends and the possibility of re-producing it.

Furthermore, as long as capitalist<sup>investors/</sup> can increase ~~their~~ profits without suffering from the growing pollution of the environment, this problem does not worry them too much. It is only when its own system's/  
/physical and social existence is threatened that it demonstrates a desire to seek partial solutions corresponding to its capitalist nature. Capital draws profits both from the protection and the destruction of the environment by developing a new branch of production and seeking to have it financed by the state, which makes the workers pay for "pure water" and "pure air" through the tax system. In other words, pollution becomes big business.

One neighbor to the north - The USSR - has developed its northern areas to the point of building cities like Norilsk on permafrost. Its fragile environment is much like that of ours in northern Ontario and elsewhere in Canada. We should welcome and encourage exchanges between Canada and the USSR in this particular area of expertise and common concern concerning development of resources in ways that benefit the people. The difference between us and the Soviet Union with respect to social and economic systems is not an insurmountable obstacle if there is a will to do it, as Farley Mowat, the author of "People and the Deer" can attest to.

In the Soviet Union, as in other socialist countries, prevention of the pollution of the environment, like the long-term rational use of natural resources, follows organically from the essence of the socialist system and becomes a task of the state, on which depends the successful fulfillment of the national economic plans and the well being of the present and future generations.

Definite steps in the protection of nature are also taken in capitalist countries. A fundamental obstacle to their realization however, is provided by the contradiction between the interests of the owners of enterprises which pollute the environment and of the population which suffers as a result.

Economic and moral problems are inextricably bound together. The world's material crisis is reflected in a moral crisis. The trouble with most ethical systems is that they have divorced judgment of virtue and right conduct from the social setting in which alone they can have any meaning.

Socialism, rather than leaving ethical considerations out of the picture, represents a fusion of objective social science and the highest ethical ideals of the ages.

Capitalism, presents a different picture. Here moral judgments are largely irrelevant and meaningless. The nature of the economy imposes certain limits on the best of intentions and operates totally irrespective of human values.

Ontario's Environmental Assessment Act, under which this Commission operates, seem to suffer from such limits on best of intentions. The vast majority of developments appear to be exempted from assessment under this act.



The Ministry of Natural Resources seems to bypass its own legislation and the environmental Assessment process, as in the case of the 'Road to Detour Lake' in Northeastern Ontario, and in its approval of a strategic land use plan for Northwestern Ontario without any meaningful reference to this Commission.

Perhaps, just perhaps, Donald McAlpine's contentions about inaccurate timber estimates should be looked into a bit more closely by this Royal Commission, if it has not already done so. Even a cursory glance at the figures produced in the department's forecast of timber growth and allowable cuts is enough to produce most skeptical reflections in ones mind about the reliability of those forecasts.

A Pulp and Paper Monopoly

If we go back as far as 1947 and look at Chapter XXI of the Report of the Royal Commission on Forestry of that day, headed by the distinguished Major General Howard Kennedy, C.B.E., M.C., B.Sc. (McGill), we find the following:

(1) "I do not consider that it is, or ever will be, possible to ~~achieve~~<sup>e</sup> the rational development of forest resources or to maintain our present industries under the existing plan of limit allocation, with the confusing and conflicting agreements and condition in force...

(5) "Many people on both sides of the international border believe that there are still vast areas of virgin timber awaiting development. I regret to say that the only area in which I have found any considerable quantity of mature timber in blocks of considerable extent, outside areas covered by existing licenses and agreements, is IN THE PATRICIA REGION, NORTH OF LAC SEUL....(emphasis added)

(9) "There is a widespread feeling that some individual operators have been favoured more than others and that departmental

action has been slanted to the benefit of some groups. The text of Chapters IX and XV gives substance to complaints on this score..."

Being now in the fourth decade of nibbling away through single-purpose operations by pulp and paper companies in this very area of Northwestern Ontario, can we afford to ignore this early warning of over-exploitation and the rapidly approaching end of merchantable timber in our province?

Moreover, the newsprint industry uses mainly spruce and balsam fir to this day, and grind sawlogs, railway ties, mining timber, poles and everything else into pulp or newsprint to the exclusion of other, even more valuable products.

To liberate our province from this single-purpose pulp and paper monopoly, it is now necessary for the government to establish Crown Corporations, state-owned and democratically controlled, for the purpose of reclaiming control of our resources, bringing order out of chaos, developing new multi-purpose harvesting of timber along with a massive program of reforestation and regeneration of our renewable resources. // This calls for democratic nationalization as well as democratic control, with veto rights over development by the native peoples in their own territories.

np- 7- The present political form of forest administration in this pr-

vince is antiquated and intolerable. It is bureaucratic in the extreme, slipshod, clumsy and inefficient. The present method of forest administration is to grant concession after concession to private capital without any effective control of forestry operations that follow.

It is a basic fact that trees are a longterm crop that must be reasonably harvested and not mined if we are to have security of employment, income and supply. The ground rent, fire tax and stumpage fees collected from concessionaires are simply token. Not the slightest worry seem apparent about replenishing the capital stock of renewable resources that provide the revenue, pitiful as it is.

What enterprise can possibly carry on in that fashion and hope to survive under any form of economic or political system?

As the Lumber and Sawmill Workers Union pointed out to the Kennedy Commission in 1946: "We most definitely have no grievances concerning the efficiency or the qualifications of the technical personnel of the department (Lands and Forests - at that time). But it is and has always been inadequate. We submit that this is the direct result of seeking immediate revenue to the exclusion of proper and careful preservation of the forests that produce the revenue. This is a short-sighted and asinine policy. Adequate finances can be obtained from our public forest resources to employ a sufficient number of skilled personnel at salaries that <sup>will</sup> compare favourably with the salaries offered such trained personnel by private industry".

More and more revenue must be directed toward the immediate job of surveying our resources, to produce sufficient and modern equipments needed, expansion of research in the use of wood and to wasteful exploitation, and last but not least, to bring about an entirely new policy based upon effective silviculture, conservation and efficient management on a permanent basis.

Without a serious and adequate knowledge of the extent of our resources, their quality and value, it is senseless and hypocritical to speak of supplies in perpetuity, or of "sustained yield" operations. We are confident that experts in forestry working in the field are fully aware of the falsity of such misleading phrases under prevailing conditions. At the same time they are reluctant to speak their minds, subject as they are to dictats from above. There were cases in the 1930's when qualified technical personnel were unjustly dismissed. A recent case in Thunder Bay district comes to mind in this connection, in 1982. This is intolerable and must be exposed and eliminated.

## Forest Management Agreements - a Hoax

The recent Forest Management Agreements (FMA), so called by the Ontario Ministry of Natural Resources, are supposed to establish a principle that timber harvests should be carried out on a "sustained yield" basis.

But the concept of "allowable annual cut" (AAC), bears no relation to "average annual growth" (AAG) which it must do if "sustained yield" is to be obtained.

The problem becomes even more serious when - on top of the most unscrupulous exploitation by profit-hungry capitalist investors - we add natural calamities such as forest fires and insect infestation. In fact one report, by F.L.C.Reed and Associates, projects a drastic drop in wood fibre supply in all regions of Ontario.

However, this does not find any reflection in the recommended annual timber harvest put forward by the Ministry of Natural Resources in its Strategic Land Use Plan, known as (SLUP) for short. In it, the recommendation is for drastic increases in timber cutting.

Not satisfied with this, the federal Department of Regional Economic Expansion (DREE) and Ontario's Board of Industrial Leadership Development (BILD) are throwing \$170 million dollars into Ontario pulp and paper companies for modernization and expansion of their production facilities.

Consider that the Great Lakes mill consumes 5,000 cords of wood per day. It presently leases a total of 21,385 square miles of timber land, including the Dryden Mill woodlands. In mid-70's Canadian Pacific Investments (CPI) purchased controlling interest (52%) in Great Lakes. The CPI is 99% owned by Canadian Pacific Ltd.



Abitibi Price Limited owns and leases a total of 5,200 square miles of woodlands. It was bought up by Olympia-York Development of Toronto in 1981. The price was \$530 million for which it gained control of over 90% of Abitibi-Price shares. At time of purchase Abitibi-Price assets stood at \$1.4 billion and sales at \$1.4 billion for 1980.

The recent period has been one of super-profit for the paper industry. The decline of the Canadian dollar brought a windfall of profits through the exchange rate on exports. In 1977 Great Lakes earned \$8.1 million in such windfall profits. Since then this company has improved such earnings by 50 to 85% each year.

The mergers and centralization of capital in the industry is proceeding apace. Government grants and windfall profits are going toward/ modernization of productive facilities to make the industry even more profitable for capital investors.

In this process, workers are losing their jobs, the native people's lives are being ruined, the forests disappear and nothing is going back into reforestation and forest management to ensure the sustained yield we hear so much about.

What conclusion must we draw from this?

Obviously, the time is here to call for an end to this course that takes us nowhere except to disaster.

We have already advanced a program for the native people in Canada, for their right to self-determination and for an end to racism and prejudice.

It is obvious, and has been so for a long time, that growing monopoly control by private capital in development of natural resources is not in the best interests of Canada and its people.

Some Conclusions and Proposals:

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(1) ~~THE~~ Ontario must bring pressure to bear on Ottawa and the U.S.A. through the International Joint Commission/<sup>to</sup>put an end to, and take steps to deal with, the consequences of acid rain and all forms of environmental pollution.

(2) The settlement of Native People's land claims and their full involvement in northern resources and industrial development must include veto rights on all such development in their own territories, as well as provide for their traditional hunting and fishing rights.

(3) Affirmative action programs to bring Native peoples housing, jobs and services up to provincial standards.

(4) Put an end to the domination by the pulp and paper ~~industry~~ <sup>of the</sup> nationalization/industry's facilities and the creation of a publicly owned and democratically controlled pulp and paper industry.

(5) A program of massive reforestation to restore depleted forestry resources

(6) Restore the right to strike and free collective bargaining in a Bill of Rights for Labor, including a 32-hour week at 40-hours pay <sup>the</sup>

(7) Environmentally sensitive mega-projects, such as/<sup>the</sup>contemplated Polar Gas pipeline and Onakawana Development Limited's proposal to strip-mine lignite brown coal deposits north of Cochrane will not benefit the people of Ontario and Canada, except as publicly owned and operated developments under democratic control.

(8) Diversify the timber industry and develop manufacturing, including a machine building industry to supply forestry and mining.

Respectfully submitted by

The Communist Party of Ontario/Ontario

Room 11, 24 Cecil Street  
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**JB**



Rec'd JAN 27 1983

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January 25, 1983

Royal Commission on the  
Northern Environment  
261 Third Ave.  
Timmins, ON

Dear Sir:

The Cochrane-Timiskaming Travel Association with a mandate of promoting and enhancing the development of regional tourism in the James Bay Frontier appreciates the opportunity to make the following suggestions for consideration during the Commission's hearings on development in Northern Ontario.

The following suggestions are in direct support of the Cochrane Tourist Outfitters association's brief to be presented at the Cochrane hearing and dated December 5, 1982.

Firstly, if development in the James Bay Frontier area is to be considered, the Environmental Assessment Act policies and guidelines should be observed where the act applies. Cutting corners, in my view, will only bring about a chaotic situation resulting in problems for all user groups. I am definitely not against development of other industries, however I am opposed to exploitation of one resource at the expense of another, i.e. fly-in outfitters vs. access roads, stemming from mining or forestry development.

Secondly, LUP'S should have a longer guarantee. How can we expect to enhance the development of tourism when fly-in operators are working on one year terms.

I certainly feel that if the forest industry is given a 20 year guarantee through Forest Management agreements the tourist outfitters who play such a crucial and economic role in the tourism industry should at least be given the same. In other words, what's good for the goose is good for the gander.

Cont'n

For 1982 the minister for the Ministry of Tourism & Recreation states that, "for 1982, tourism to Ontario accounted for some 9 billion dollars to Ontario's economy as well as creating 541,000 man years of employment."

With this in mind I feel all ministries involved with the Detour road development and, further, the MNR with control over Forestry Management Agreements should have a closer look at the user groups in the James Bay Frontier.

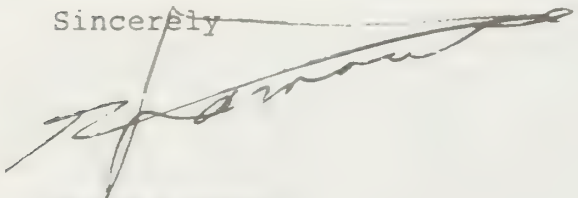
If tourism is to continue growing and continue providing the economic growth it has in the past, I feel all government ministries should look at this important industry with a serious outlook.

If Northern Ontario, according to a report in the MIT in 1980, is to be at the heart of Ontario's tourism experience, then it is obvious that more public input and more attention to the input is of crucial importance.

Again, we are not against major developments such as the Detour Gold mine or forestry, but we are definitely against exploiting the above mentioned economic vehicles at the expense of another such as tourism, especially when it was identified that the latter industry will be of utmost importance for the province of Ontario by the year 2000.

Thank you for this opportunity.

Sincerely



Guy Lamarche  
Manager

GL:KP



THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

Submission by C. Henry Brehaut  
January 31, 1983

HS

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INTRODUCTION

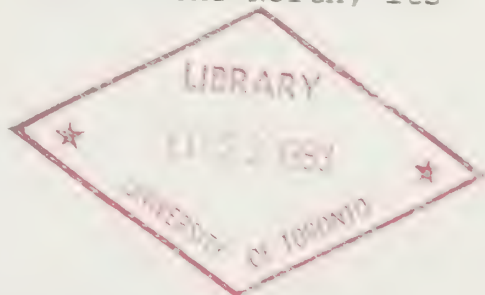
The main objective of this brief is to contribute ideas to the development of methods that will enable mining development to proceed in an orderly and beneficial manner in Ontario, north of 50 . Reference is made to the Order in Council which directs the Commission -

"to inquire into methods that should be used in the future to assess, evaluate and make decisions concerning the effects on the environment of such major enterprises"

and to Mr. Fahlgren's letter of July 5th, 1982, in which he states that -

"I will be investigating ways of ensuring that resource based development proceeds in a manner that is more orderly and beneficial and less damaging in its economic, social and natural environmental effects. I will also be identifying opportunities to improve the procedures for reaching decisions about development and environmental protection and to secure more effective public participation in those procedures."

In addressing questions arising from the above, it is judged that the structure of the Environmental Assessment Act, 1975, is seriously flawed and, as was shown in the Commission's report, "The Road to Detour Lake", its application did not serve the interests of any of the participants. The Act in its present form is not well conceived in general terms, and when considered for application in the North, its structure is even less appropriate.



It is believed that the ideas to be presented in this brief are particularly pertinent to the unique conditions in that part of the Province north of 50 . It is also believed that the decision-making processes that have existed in the past, as they relate to the mining industry, have been more than adequate to prevent significant negative impacts to the environment. On the other hand, mining's positive contributions have been significant in many areas and there should be no doubt as to its overall beneficial impact on the environment as broadly defined in the Commission's terms of reference.

Because of this, it is likely that very few mining projects would fall under the definition of "major enterprises", if negative impacts were to be the major reason for designation as such. New mines now being brought into production are subjected to rigid controls through existing legislation which ensure that potential impacts on the natural environment are reduced to acceptable levels. Potential impacts beyond the mine site related to road access, power supply and housing do not fall within the same control system and, at the start of the planning process for a new mining project, it will not be immediately obvious whether or not the project will eventually be judged to have significant negative impacts on the environment in these specific areas.

In order to recognize valid concerns by the Government and the public related to any new development, procedures will be proposed in this brief under which mining projects can be assessed. These procedures have been developed in an attempt to strike an acceptable balance between the need to streamline and simplify the review process for the benefit of industry and the Province's desire to satisfy public expectations that new projects will be thoroughly assessed and effectively regulated.

For such procedures to be effective they must provide sufficient flexibility to ensure that the process can be tailored to suit the type of mine being proposed, its size and the scope of the potential impacts. They must also be designed to primarily address those problems and concerns which cannot be directly regulated by licenses, permits and approvals, pursuant to existing legislation.

#### INITIAL CONCEPT

Once an exploration program has successfully identified a mineral deposit of possible economic interest, it soon becomes public knowledge which, in the absence of specific information, can lead to a number of uncertainties and concerns in the minds of the public. Unfortunately, the mining company needs time to conduct studies before even a general indication can be given of the nature of the undertaking to the Government and the public.

At the start of the study process, a mining company is faced with a wide range of options. Initially, a number of alternatives have to be examined from a strictly technical perspective in order to establish the optimal method of operation, including the size of the plant. Once the technical factors have been addressed and further study appears to be warranted, consideration can then be given to those factors having an impact beyond the immediate mine site. It is only at this stage that realistic alternatives can be identified and the magnitude of the possible impacts can be estimated. Assuming that the project is indicated to be economically viable at the conclusion of the preliminary study, the proponent would then be in a position to describe its likely development in general terms to the Government and the public.

## UNOFFICIAL PROSPECTUS

It is believed that once a general concept of the undertaking has been established it is in the best interest of all concerned for the developer to communicate his plans, as initially formulated, to the Government and the public.

The initial means of communication could take the form of an unofficial prospectus which would be accepted without prejudice to the later classification of the project under the Environmental Assessment Act. It is important to development in the North that the decision-making process be as open as possible, with the public being made aware of the nature of proposed undertakings at an early stage. To establish specific requirements as to content and timing for such a prospectus, however, would be difficult and it is not recommended that this procedure be formalized.

The benefits of participating in an open consultation process with the Government and the public at an early stage are significant in terms of identifying the major concerns, if any, so that the decision-making process can be tailored to fit the specific circumstances of each case. It is believed that the ability of a developer to eliminate or minimize concerns before being subjected to a formal review system will be a sufficient incentive to engage in early consultation. To the extent that the developer does not deal with concerns that might arise, they will remain to be considered later in the formal stages of the decision-making process.

With the exception of those references to the presumed application of the Environmental Assessment Act, the "Guidelines for Pre-Submission Consultation" as issued by the Ontario Minister of the Environment, October 1982, contain an excellent overview



of the benefits of early consultation and the principles essential to its success. It is proposed that this document be modified as required to encourage early consultation on the terms outlined above and it should contain specific reference to the recommendation that the willingness of a developer to engage in early consultation can be undertaken without prejudice to the project's status under any formal requirements that might follow.

#### DEVELOPMENT PROPOSAL

Once the developer has a general idea of the possible undertaking, detailed studies are initiated for the purpose of formulating a specific proposal and confirming the economic attractiveness of the project. It is important that all significant environmental concerns be identified and considered as early as possible in the planning process. Experience has shown that a large number of public concerns arise from a lack of information as to the developer's plans and, because of this, can be dealt with through the process of open communication. For those concerns that cannot be resolved in this manner, the developer will at least be aware of the issues that must eventually be addressed.

From the point that the preliminary prospectus is issued, the developer will progress from a general concept to a specific plan for the proposed undertaking. The developer should then present his proposal in a formal manner in what could be best described as a "Development Proposal". This report would be expected to contain a definitive mining plan, an assessment of the potential environmental and socio-economic impacts and the mitigation measures selected to meet any outstanding public concerns of a significant nature.

## GOVERNMENT REVIEW

The main objective of the Development Proposal would be to provide the Government with information for the purpose of assessing the project in terms of its environmental impacts in order to decide on how the approval process should proceed. Adequate organization and procedures required to undertake such an assessment and to decide on the approval process do not presently exist, and new approaches must be adopted by the Government of Ontario.

The basic problem arises from the conflicting responsibilities of the Ministry of Environment. On one hand, its primary role is to protect the natural environment. On the other hand, the Ministry has been charged with the responsibility of administering the Environmental Assessment Act which, because of its focus on the total environment, inevitably requires trade-offs between natural, social and economic factors. Also, as noted by the Commission in its study "The Road to Detour Lake", personnel in the Ministry of Environment cannot "be expected to have a fine understanding of the diverse nature of all the projects subject to the Environment Assessment Act".

To avoid the basic problems mentioned above, it is recommended, for the purpose of reviewing a "Development Proposal" report, that a committee be formed, chaired by the Ministry of Northern Affairs, with members being appointed by all interested Ministries. It is contemplated that appointees to the committee would be senior officials with a working knowledge of the development.

A "Development Review Committee" would be constituted for each undertaking at the request of a developer. The "Development Proposal" would be submitted to the committee which in turn would be responsible for its distribution to all interested government departments and the public. Comments would be required within 30 days, following which the committee would meet to assess the significance of the environmental impacts. The assessment would be based upon information provided in the Development Proposal and on submissions received from government departments and the public. Completion of this step should take no longer than 30 days.

Individual impacts would be initially assessed with the object of determining whether sufficient information had been presented to provide an adequate basis on which to make a decision. In the event that the information was judged to be insufficient, the report would be returned to the developer for upgrading. Once the information was judged to be satisfactory, the committee would then decide on the approval process to be followed for the project. Based on the nature and extent of the impacts, the committee could decide:

1. that the scope of the potential impacts would not be significant and that a formal public review process would not be required, or
2. that the scope of the potential impacts, in a limited number of areas, were sufficiently large to warrant formal public review. In such cases, the committee would identify the topics of specific concern and how they should be addressed in the review stage. Those areas where the impacts were judged not to be significant would be treated in summary form and would not be subject to public review, or

3. that the impacts of the project as a whole were significant and that the total project should be subject to formal public review.

In deciding on the nature of the approval process, the impacts would have to be judged to be of a substantial or significant nature in order to warrant the implementation of a formal review process. Such decisions would have to be based on the particulars of each case and be judged within the overall context of both the positive and negative impacts of the project. In this regard, it is noted that a major negative impact in the form of delayed economic benefits would result from delays related to the public review of insignificant issues.

Another important consideration is the exclusion from public review of those matters that can be effectively handled through routine permitting processes. The Province has established a comprehensive set of licenses, permits and approvals which must be obtained for a development to proceed. The mining industry is well regulated in this regard and such regulations should not be the subject of public review as they apply to individual undertakings.

Finally, it is the Government which must make the decisions. If the committee is unable to resolve all conflicts, then such matters must be referred to a more senior level with Cabinet having the final say if required. Without denying the public the right to participate in the decision-making process, it is not the right of any person or interest group to determine what is in the best interests of the Province. The public has the right to have its comments and concerns heard and considered but the decisions must be made within the system of representative government which we all elect.



In developing procedures for public participation in the decision-making process, it must be recognized that not all conflicts will be resolved and not all concerns will be satisfied. Because of this, decisions have to be made as to the benefits of continuing the process at each stage. At some point, the benefits of getting on with the development proposal will outweigh the significance of the issues remaining to be resolved and judgements have to be made in this regard. A decision-making process without definite time limits and without a mechanism to review its continuation within the political process would be an avoidance of its responsibility by the government. However, just as the developer is expected to support the way in which the issues are dealt with, any decisions by the Government pertaining to either the extension or curtailment of the decision-making process should be accompanied by a statement as to the underlying reasons for such decisions.

#### FORMAL PUBLIC REVIEW

For those projects with limited impacts but requiring formal public review procedures, the developer will have to revise his Development Proposal to include more information as directed by the Development Review Committee. Depending on the exact nature of the concerns to be addressed, it is expected that the focus will be on a more detailed presentation of information pertaining to those impacts under review. This would include a description of the alternatives, background information, impacts, mitigation measures and an evaluation leading to a recommended course of action. The objective of this stage would be to end up with a proposed plan which shows that the major impacts can be managed and be reduced to acceptable levels. This report could be called the Stage II Development Proposal.

When completed, the Stage II report would be submitted to the Committee for review as to content. This decision should be made within 30 days. When the report is found to be acceptable, it should then be released to Government departments and the public for a 30 day period. During this period, the committee would receive submissions from all interested parties.

Based on information presented in the Stage II report and on submissions received, the committee would have 60 days to decide whether the proposal, as submitted by the developer, could be approved with or without adjustment. Conflicts at the committee level would first be submitted to an 'ad hoc' committee of the Deputy Ministers of those Ministries involved and, if still unresolved, to Cabinet.

For those projects requiring review in their entirety, a more complex system may be required, but the application of the Environmental Assessment Act in its present form cannot be recommended. The need for major revisions to the Act is well documented, although recommendations in this regard are beyond the scope of this brief because of the belief that few, if any, mining projects would need to be subjected to such extensive reviews.

#### CONCLUSIONS

The objective of greater public participation in the decision-making process has not been well served by the Environmental Assessment Act. Exemptions from the applications of the Act have been given for good reasons, which is direct evidence of its shortcomings. Unfortunately, such exemptions have removed projects from the formal requirements of any public involvement without providing a workable alternative. Essentially,

the decision-making process now operates at two extremes. In one case, little or no public participation is required but the job gets done, at least in the mining industry, with a high degree of open consultation and with minimal negative impact to the environment. At the other extreme is the Act with its time-consuming and expensive procedures. In this brief, an attempt has been made to present a system of public participation which can be suitably adapted to each project in terms of its potential impacts. As stated in the introduction, these procedures have been developed in an attempt to strike an acceptable balance between the need to streamline and simplify the review process for the benefit of industry and the Province's desire to satisfy public expectations that new projects will be thoroughly assessed and effectively regulated.



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SUBMISSION TO THE ROYAL COMMISSION  
ON THE NORTHERN ENVIRONMENT

Made in Geraldton at  
B.A. Parker Public School  
Tuesday, February 1st, 1983  
By: Michael Power

r. Commissioner,

It is now more than five years since this Commission was established by Order-in-Council. In these years this Commission has had its share of ups and downs. You have been applauded by the public and media and you have been castigated by the public and media.

At the time of the first hearings under Mr. Justice Patrick Carleton, I had the honour of presenting a Submission on behalf of the Town of Geraldton. In that Submission we outlined our concerns and indicated some of the areas we hoped the Commission would examine and make recommendations on. Those early days were heady indeed. Everybody was lined up to present their point of view and provide advice. Very little was provided in the way of solutions. That was because we looked at this Commission as the body who would find out what the concerns of Northerners were - what the problems of Northerners were and make suggestions. I am sure the archives of the Commission are jammed with a litany of the problems that we perceive to exist in the North.

In terms of the Canadian picture, we are not really the north. In terms of Ontario, we are. The problems we face are very real to us. We are often concerned that the decision makers are not aware of our problems. Sometimes we believe that the decision makers decide



for us what our problems are and then provide solutions without ever looking to see if they are on the right track.

This Commission provided us with the opportunity to make people aware of what we perceive our problems to be. That was the easy part. The hard part was in suggesting solutions. In leaving it up to this Commission to provide solutions, we were again failing ourselves. We, as Northerners, are perfectly capable of providing the solutions to our problems. The difficult part will be to get the decision making process to agree.

In the past half decade, Mr. Commissioner, you have studied just about everything there is to study in Northern Ontario. I dare say you have studied things we did not even know existed. A great many reports have been produced. Much statistical material has been accumulated. Only time will tell how valuable this work has been.

The fact that you have decided to end the life of the Commission by asking us to present solutions to the problems we face is significant. It demonstrates that you have gone through a learning and maturing period. Instead of posing solutions without input from the people concerned, you provide us with the opportunity to have almost the final say on our own 'community'. This is important because the final report of this Commission may provide the base on which decision affecting the North will be made for sometime. It should certainly provide the base on which we can construct arguments to government

dealing with the North. If it does not, the Commission will have failed Northerners.

When we learned that the Commission would be holding hearings to look at solutions to problems, a group of us in the Geraldton area began to discuss ways in which the expertise of people who live in this area could be formulated into a meaningful contribution. Our discussions led us to the inevitable conclusion that it would be impossible to look at the subject "Northern Ontario". Rather, it was necessary to look at some aspect or aspects of Northern Ontario. Accordingly, we chose three areas that we felt we have some expertise in and on which we felt we could make meaningful suggestions.

We decided to establish three groups to discuss the areas of education, land use planning and economic development. These areas in themselves are very large, so you will understand, Mr. Commissioner, that we did not cover all aspects of each topic.

We further decided that in order to present workable suggestions, it was desirable to have the three main groups that live in Northern Ontario involved in the process. Arguments can be made as to our decision concerning the three groups. Without any intent to offend people, we are of the opinion that the English, French and Native groups presently constitute the overwhelming majority of people in Northern Ontario. Further, we believe that this will continue to be the case for as far into the future as we can project. We felt that if

Land Use Planning

The committee found that it was almost impossible to get a handle on this topic. Most information is presented in a technical way that makes it very difficult for the average person to understand. Planners, as is the case with all professions, have their own language that almost prohibits 'people comprehension'. In the final analysis, the committee decided that the aspect of land use planning that was most important at this time was the proposed Strategic Land Use Plan proposed by the Ministry of Natural Resources for Northwestern Ontario. Similar plans have been drafted by the Ministry for other sections of the Province and many have already been put into place.

The committee commended the Ministry for using language that nearly everyone could relate to. To quote the document:

"Strategic Land Use Plan is the result of a systematic inventory of Northwestern Ontario's resources and a policy for their use in the future.

Objective: To administer, protect and conserve public lands and waters; and to ensure with other agencies, through participation in planning and control, co-ordinated uses of all lands and waters."

This is very simple and plain. The Ministry, on behalf of the Government will decide. You will notice, Sir, that people do not enter into the equation.

It would appear that decisions will be made by the Ministry in



consultation with other agencies. The group that is most affected, the people the Plan governs do not seem to have any say in these matters. We notice that 'public comment' will be solicited before major amendments are made to the Plan. This does not mean that the public will have the deciding say.

The Plan does acknowledge 'The Public Interest' and admits that the special interests of the residents of the area need to be taken into account. Unfortunately, only the native people are singled out as a group that has an urgent need to be communicated with effectively. Surely, we all need to be communicated with effectively.

Our committee is of the opinion that public comment on a document is not sufficient to ensure that the final document will mirror the actual wants of the people concerned.

We, as a committee, found it difficult to achieve consensus on many aspects of land use in our area. We realize that it would be very difficult to form a committee for the purpose of formulating a Land Use Plan. However, we do believe that there is a better way to formulate a Land Use Plan for Northwestern Ontario that reflects the opinions of the majority of people in this area. While our suggestion is costly, we do not think it is any more costly than the process the Ministry has gone through.

Recommendation:

THAT a committee composed of representatives of elected people

from the regions concerned be established to formulate a Land Use Plan, which would include organized groups, unorganized groups and native groups. Resource personnel would be provided by the Ministry of Natural Resources and other agencies.

IN Northwestern Ontario there would be two such committees to reflect the two present administrative regions. Co-ordination could be provided between the two committees, but it should not be deemed as essential that both administrative regions have identical plans. 127

THESE committees would report directly to the Minister. ;

The Land Use Committee was concerned that there appeared to be no real 'people' involvement in the decision making process affecting them.

#### Economic Development

This committee experienced a high degree of frustration in attempting to meet their goal. On many occasions various members felt that there was no way the committee would be able to present any reasonable solutions leading to meaningful economic development in Northwestern Ontario. All the indicators point to a continued decline in any form of processing industry, limited as it is at this time. Transportation problems, remoteness from the market, lack of a labour pool and reluctance of venture capital to commit itself to this area all combine to mitigate against significant new ventures.

The group finally turned its attention to the resource based in-

dustries and tourism.

Much of Northwestern Ontario is heavily dependent on the forest industry for its economic well-being. It was agreed that the basic health of this industry was dependent on the economy of the country as a whole and the export market. The committee was unable to formulate any realistic and feasible recommendations on these matters.

The committee looked at the problem of sustained yield of our forests to ensure that a continuing supply of trees would be available to avoid reaching further and further toward the margins of the harvestable forest. Part of the problem appears to be that there is no comprehensive forest study inventory with uniform forest volume figures. It also appears that more intensive and progressive silvicultural practices could lead to better use of existing forests and a greater level of employment. *In add invs*

#### Recommendation:

THAT a uniform forest inventory process be established to apply to all landowners or licencees as a first step to ensuring a common approach toward sustained yield.

THAT a more intensive commitment be made by both industry and government to forest renewal through significant increases in Provincial budget expenditures and increases in stumpage fees to be applied directly to forest renewal.

THAT a more intensive forest management program be instituted in Ontario.

When the group turned its attention to the mining sector, they found themselves in another area where there was no real common agreement among the people they talked to or among those with some experience. The main theme seemed to be 'government aid'. The committee was not of the opinion that this, in itself, would lead to a significant increase in producing mines. Since we are located in an area that had many producing mines in the past and experiences considerable mining exploration now, the group could only conclude that general economic conditions precluded active development. They did agree that Provinces such as Quebec and New Brunswick appeared to have more favourable tax laws governing the mining industry, but were unable to conclude whether this had led to a greater degree of producing mining activity in these jurisdictions as compared to Ontario.

The committee looked at a complaint that claims can be tied up for many years with little activity on them and minimal revenue to the Province. It was brought to their attention that it had been suggested in the past that a tax be applied to all mining rights to encourage development. There was considerable sympathy for this idea, but the group was not prepared to make a recommendation without more time to investigate the matter thoroughly.

It was suggested by a number of the people the group talked to that a core library would be of benefit to the region east of Thunder Bay.



Recommendation:

THAT a core library be established in the area east of Thunder Bay under the auspices of the Ministry of Natural Resources.

As the Commission can see, the group was frustrated in its attempt to make meaningful suggestions that could lead to an upsurge of mining activity in Northern Ontario.

The committee felt that the area of tourism offered the best prospect for economic development in the Northwest at this time. Studies show that people have more leisure time and are more willing to travel within Canada now. The group discussed methods of promoting the North and realized that all promotion has always centered around 'outdoor activities'. We have not developed family oriented tourist activities. In the competition for the tourist dollar, the Northwest has generally tended to ignore the families. The group was of the opinion that we should be more aggressive in selling the Northwest as a vacation area and in identifying and developing tourist attractions.

Recommendation:

THAT the Ministry of Northern Affairs, the Ministry responsible for tourism, and the Travel Associations undertake an intensive study to see what kinds of tourist facilities can be developed in Northwestern Ontario and aid in their development with the help of private enterprise. Such attractions as old mines, historic forts, natural beauty areas, outdoor activity areas and any existing attraction could be identified and promoted along the

lines of Old Fort William.

In general, the committee was of the opinion that the Northwest, as is the case with the entire developed world, was in a state of re-organization and could be about to move in directions we can not yet identify. As a result they found it difficult to make specific recommendations that they think may help to solve some of the economic development problems of the Northwest.

Recommendation: ;

THAT a panel of government and industry representatives be established to try and determine what types of economic development would be feasible in Northwestern Ontario and what incentives would be necessary to facilitate this development.

THAT a group of Industrial Development Commissioners be funded by the Province, in conjunction with Municipalities singly or in a reasonable cluster concept on an 80-20 cost sharing basis for a trial period of time. We would suggest a period of five years.

Education

This committee had great success in terms of their interpersonal relationships and in meeting their goals. As with the other groups, the topic was too broad to cover in its entirety. This committee made every possible attempt to obtain input from the native community, because they identified quality education as a greater problem for this group than for others. Some input was obtained.

The group attempted to confirm their attention to those areas which they felt most fit Northern Ontario. The recommendations are the result of a great deal of thinking and discussion on the part of the members.

Teacher Training -

Northern schools have to function in relative physical, social and professional isolation. Northern teachers have great demands made upon their personal resources as they must adjust not only to a new physical, social and political environment, but as well, they have to adapt to very special educational circumstances.

All of these environmental factors impose upon the northern educator, a set of hardships which can not be appreciated unless one is living and working under these conditions. The majority of student teachers have no conception of life in a northern community. The evidence of this is reflected in the high turnover in staff of the northern schools. This factor alone must affect the continuity of quality education.

While teacher training institutions give student teachers an excellent background in educational theory, the training is inadequate to prepare a young teacher for the realities of the actual classroom situation. There exists a great need for student teachers to receive better practical training in the field.

Recommendations:

- (1) To encourage teachers to stay in the north, adequate living quarters which are comfortable, clean and well maintained must be provided,
- (2) Since school attendance is mandatory, proper school buildings that are sound, clean, warm, comfortable and safe, and comparable in all aspects to the schools' <sup>in</sup> small southern communities, must be provided for the children of the north, and their teachers,
- (3) A thorough screening, followed by minimum five day orientation, should be given to prospective teachers contemplating working in a physically isolated northern community. This screening to be carried out by a committee of at least one professional and community representatives,
- (4) One extended training period, of not less than three months, under the supervision of one associate teacher, and
- (5) Cost of an extended training period to be considered as part of the normal fee a student teacher would pay in receiving his education.

Effects of Recommendations:

- (1) A decrease in teacher turnover,
- (2) Continuity in quality education,
- (3) Student teachers would become more familiar with the special demands of northern communities,
- (4) Classes with special student needs would benefit greatly with the aid of a prospective professional in the classroom,



- (5) The general enthusiasm and youthful insights of a student teacher would be a positive addition to the professional atmosphere of a school,
- (6) Those people unsuited for the teaching profession would be more readily identified prior to assuming responsibility in the classroom, and
- (7) The cost of such a program would soon be recovered in the form of more competent and better adjusted teachers.

School Board Administration -

Many School Boards in the north are existing in a vacuum. To attain a sense of belonging, to standardize educational opportunities and to have a more effective administration, the formation and composition of existing School Boards must be closely examined to meet the needs of today.

Recommendation:

- (1) Feeder schools of high schools be grouped within the jurisdiction of either one Separate School Board or one Public School Board. Measures must be provided to avoid the swamping of small isolated or rural schools, due to more Board representation by the larger schools. Closing of small schools as the result of a vote of the majority who are not affected, is not the aim of this recommendation.

Effects of Recommendation:

- (1) Sharing of a common curriculum and expectations,

- (2) School year calendar (holidays) - common school calendar for purposes of family management - all children in all levels of education would be off or in school at the same time,
- (3) Common problems as common decisions - routines, health, etc.,
- (4) Professional Development Days - Workshops - exchanges,
- (5) Special teams,
- (6) Cost sharing rather than individual costs,
- (7) Resource people for common programming to insure continuity,
- (8) Cultural events, and
- (9) Teacher exchanges.

Educational Support Systems -

Support systems such as psychometrists, psychiatrists, speech therapists, hearing specialists, special educational consultants, and procedures for effective family involvement for the child with special needs are non-existent for northern communities. The distances in the north essentially make these services out of reach. This factor, and the demand that Bill 82 is placing on northern educational systems, necessitates serious efforts to bring these services to the local level.

Recommendation:

- (1) Funding must be made available to School Boards to purchase the diagnostic and remedial services of educational specialists.

Effects of Recommendation:

- (1) Support systems for schools - psychological aid, speech therapy, etc., and
- (2) Continuity of procedures to follow.

Peripheral Support Systems -

What is available, and what are the required procedures to use the existing services of children's aid, mental health, social services, public health and medical services?

Recommendation:

- (1) We recommend that the existing support systems be assessed in terms of the availability and the services provided. That the procedures to use the existing support systems be clearly defined and known. In other words, that for a particular case, or problem, one would know on which door to knock. This assessment would help to identify the support systems which are now available. This recommendation should take into consideration the needs of the cultures involved, namely the francophone, anglophone and native communities.

Effects of Recommendation:

- (1) Awareness of what aid is available.

Senior Citizens -

Our Senior Citizens are the forgotten generation. Their physical,

mental and emotional needs are frequently overlooked. Our elders are a valuable human resource to the small northern community.

Recommendations:

- (1) Measures should be taken to establish local or regional authorities to identify and bring to the attention of the total educational system the talents, knowledge, and expertise of Senior Citizens of one area, so that they become resource people who would take an active part in the educational process, and
- (2) Projects through the summer employment program should be implemented in order to identify the different resources available to the Senior Citizens of one area. Measures should be taken to establish local and regional authorities to undertake such a task. By resources we mean: cassettes, talking-books, large print books, aids for hearing, speech or vision impairment in telecommunications, college or university courses, etc.

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Geraldton Board of Education - Submission to the Royal Commission on  
the Northern Environment

Recommendation:

- (1) We fully endorse the recommendation that follows of Mr. A. Korkola. It is this type of initiative that will improve education in the North.



Geraldton Board of Education  
Submission to Royal Commission on the  
Northern Environment

- WHEREAS Forty-three (43%) per cent of the secondary students who start in Grade 9 never finish Grade 12 to receive a Secondary School Graduation Diploma,
- WHEREAS This percentage of students who terminate their formal education must be at least equally high in Northern Ontario,
- BE IT RESOLVED That the Commission strongly recommend to the Province that the Provincial educational system address this major problem with a sense of high priority so that these students would by the time they reach age 16 (the legal age of quitting school) have the following:
- a) a broad understanding of the major primary industry in their geographic area, eg. Forest Products Industry, Mining Industry, Agricultural Industry. This broad understanding to include:
    - a historical perspective of the industry,
    - the economic significance of the industry,
    - some understanding of the private enterprise system,
    - an understanding of the role and responsibilities of the worker, unions, and Company management,
  - b) a broad understanding of the life-long career opportunities in that industry; eg. unskilled, technical

and professional,

c) an understanding of some basic "life skills",  
such as the following:

- personal financial planning and consumer awareness,
- human relations skills necessary for successful living in the workplace and in the home,
- physical and mental well-being attainment,
- Canadian citizenship, and

d) some readiness in understanding and skills for entry into the local employment situation.

FURTHER BE IT RESOLVED That school systems have the resources and authority within Provincial guidelines to adapt flexible programs suited to local industrial and student needs:

Reference: Ontario Ministry of Education, Secondary Education Review Project, 1981, Recommendations #52 and #53.

Namely:

Recommendation #52:

THAT, where appropriate, "school-related packages" be designed to accommodate the educational and vocational goals of students in order to provide a practical incentive for them to continue their studies.

Recommendation #53:

THAT the Ministry of Education be prepared to approve

on an experimental basis "community-related packages" that may be developed jointly by teachers and community personnel.

FURTHER BE IT RESOLVED That new school programs addressing the high percentage of potential school drop-out's emphasize practical and applied learning modules. For example,

- a high percentage of the student's school studies be related to co-operative education, work experiences and field studies,
- provide flexible timetabling opportunities so students could gain as much as possible from actual on-site outdoor/in-plant learning, and
- be related to Ontario Ministry of Education Linkage opportunities for continuing and recurrent education.

WHEREAS Geraldton Composite High School has played a leadership role in Ontario since 1977 in trying to develop such a program entitled, "Forest Products Industry Program" in co-operation with the following:

- Ontario Ministry of Education; Skills Branch, Toronto, and Regional Office, Thunder Bay,
- Faculties of Forestry of Sir Sandford Fleming and Sault College,
- Geraldton Board of Education,
- Kimberly-Clark of Canada,
- Ontario Ministry of Natural Resources, Geraldton

District,

- Ontario Lumber Manufacturers' Association,
- Canadian Pulp and Paper Association, and
- Ontario Forest Industries Association.

AND WHEREAS A Provincial Steering Committee has been struck representing government and private industry, and that is co-ordinated by the Ontario Ministry of Education Skills Division.

BE IT RESOLVED That this Steering Committee receive the necessary funding support from the government to,

- a) expedite the development of related curriculum for an innovative Forest Products Industry Program for secondary schools,
- b) provide support funding for selected pilot schools to field test and develop such curriculum,
- c) share through Ministry of Education curriculum guidelines and resource documents the related curriculum materials to all school systems in Ontario, and
- d) promote the development of such courses in other areas of Ontario.

WHEREAS This concept has applicability to not only the Forest Products Industry in Northern Ontario, but also to Mining, Agriculture, Manufacturing and other industries in all of Ontario.

BE IT RESOLVED THAT On the success and experience of this proposed pro-



gram and model that apprenticeship and linkage opportunities be further expanded and developed for pupils by the development of similar innovative and practical programs for other sectors of the Ontario economy and employment market.

SUMMARY

If we can develop school programs that meet the immediate interests of these pupils and the initial needs of industry, we can then eventually prepare these pupils to be better prepared for participation in the Canadian economy. With enhanced life skills we could eventually expect the quality of life for everyone in a community to improve. In Northern Ontario the students who "drop-out" of school are frequently the ones who remain behind in the community as they have not in the past, had the technical skills to compete for jobs in large urban centers. A program that would make them more understanding of the role of the principal local employers, their potential role as workers in that industry and to be better prepared as individual citizens would be a major step in helping these students, their community and our Province.

Conclusion

Mr. Commissioner, we found that this was a challenging project. It was actually larger than we had originally invisioned and thus we were not able to meet the goal we had set for ourselves. In retrospect, our goal was too large to achieve in the time frame we allowed.

We felt that we made a great deal of progress by the fact that we forced ourselves to think about solutions to the problems that have been enumerated about the North. It is a sinking realization to finally accept that it is easy to pinpoint the problem, but very difficult to present an acceptable solution.

As Chairman of the project, I must offer my apologies to this Commission because I failed to deliver what I had originally promised.

Our group hopes that this presentation may be of some help in your decision making process. We look forward to seeing the final report of this Commission and expect that your recommendations will have a lasting impact on Northern Ontario.

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Commissioner Fahlgren,

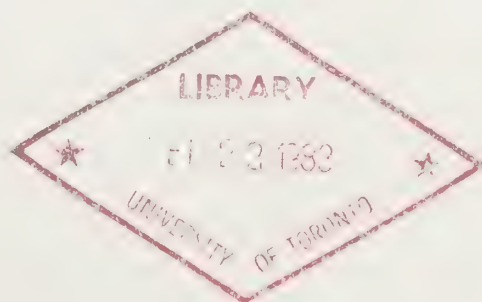
I, Raymonde Mercier have come to speak at this hearing on behalf of the Council of the Township of Nakina and for the people of the community as a whole.

At the outset, I want to make it quite clear to this Commission that the purpose of my presence here is not to criticize the Canadian National Railways. It is to examine objectively the impact that the implementation of a run-through by the C.N.R. would have upon the Township of Nakina.

We all agree that the application of technological progress is essential to the welfare of this country. However, this progress can and must be achieved without sacrifice of human values. We therefore cannot disregard the social and economical impact this run-through would have on a town like Nakina.

There has been rumors of a run-through Nakina since 1960. For a while people neglected to improve their houses, then the rumors subsided and everyone fixed their houses and the younger ones built beautiful new homes in Nakina in view of living in them all of their lives. But now again the proposed run-through threatens those people that they might have to leave everything and be moved to a strange environment.

When Nakina was just an Improvement District with no water and sewage system people still stayed and liked it. There is now a Community Complex in the town and the C.N.R. employees of Nakina helped in erecting that Complex. With those people gone there will be less people left in Nakina to pay for those commodities. Therefore creating a burden for the people that are left, many of them are pensioners.



The implementation of the run-through will result in the departure of over 40 railway employees and their dependants. Serious economical and social problems will beset those who remain in Nakina and will also be felt in Geraldton, Longlac and even in Thunder Bay.

Kimberly-Clark expanded its operations in Nakina a few years ago but with the economy of the country as it is today, Kimberly-Clark has not hired anybody for over a year and now talking about closing one camp in Nakina. This does not mean that there will be job losses but it means that there will not be new people hired for a while.

Although C.N. promises to buy displaced employees houses at market values, there is no guarantee that they will be reoccupied. Now, does C.N. recognize an obligation to continue paying taxes on acquired property.

To summarize, the railway's plan to run through Nakina does not appear to be justified except on administrative grounds. Rumors are that they will save time and money implementing this run-through but nothing to that effect has been proved with figures yet.

The governments agree that every northern community should have at least two industries and yet we are in Nakina with C.N.R. and Kimberly-Clark with C.N.R. waiting to pull out and nothing seems to be done about it.



I respectfully submit, Mr. Commissioner, that the Canadian National Railways must not implement a run through Nakina. The people of Nakina are fighting for their rights as citizens. They rely upon the Government to pay more than lip service to its Bill of Rights. The citizens of Nakina must not become pawns of automation.

Respectfully submitted on behalf of the Township of Nakina this  
2nd day of February, 1983.

Rae Mercier  
Deputy Reeve



Rec'd Feb. 7/83

HS

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— Update of HS 172 —

S U B M I S S I O N  
T O  
THE ROYAL COMMISSION ON  
the NORTHERN ENVIRONMENT

Submitted by  
The Communist Party of Canada (Ontario)  
February 21 and 22, 1983.



J.E.J. FAHLGREN

Chairman, Royal Commission  
on the Northern Environment

### Introduction

Sir:-

From its inauspicious beginnings in November of 1976 - when the Premier of Ontario proposed a commission of inquiry into the granting to Reed Ltd. of certain timber limits in the last large uncut stand in the province - this proposed inquiry with a more traditional format of examining allegations evolved, in the words of Mr. Justice E.P. Hartt, into a "new breed" of commission investigating all aspects of resource development north of the 50th parallel, a region comprising more than one-half of Ontario's land mass.

As Mr. Justice Hartt explains in his ISSUES REPORT of December 1978, by the time of the Commission's formal establishment in July 1977 under Cabinet Order-in-Council 1900-77, the Commission mandate had been expanded to assess the environmental effects of major enterprises in the north, to recommend methods for their assessment and to examine alternative uses for northern resources. The Order-in-Council defined "environment" to include not only natural environment but also the social, economic and cultural conditions influencing the lives of the people in their communities.

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It was on this background and with such authority that the then Commissioner Mr. Justice Hartt, embarked upon a series of preliminary hearings, at 14 northern locations and in Toronto between November 1977 and February 1978. In the words of the Commissioner: "...We invited people to have a say in the future of northern Ontario. The response was overwhelming...the Commission received over 450 submissions..."

Both in the Interim Report of April 4, 1978, and in the ISSUES REPORT of December, 1978, Mr. Justice Hartt writes eloquently about the "competing interests", the "conflicting nature of different pursuits", having to do with land use in northern Ontario. The Commissioner mentions recommendations for comprehensive planning involving the people affected to consider and resolve "competitive" claims on resources while preserving the natural environment to a "maximum degree." But the fundamental conflict is only alluded to but not explained. Concerning alienation of the north from the south and in particular the people of the north from the government in power at Queen's Park, he writes:

"...Even if one assumes that such conflicts can today be reconciled in this way, we are talking about a fundamental reassessment of the relationship between government and the market system, necessitating a degree of governmental involvement far greater than that which is currently acceptable."

In Mr. Justice Hartt's April, 1978, preliminary report we find the following three recommendations:

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1) that a continuing commission on the northern environment consider the ongoing questions of development north of 50 and how instruments such as the Environment Assessment Act may be utilized to ensure adequate social and physical planning before development occurs. (emphasis added)

2) that a task force of northern residents be formed by the Commission to encourage dialogue with and among fellow northerners. In this way, I envisaged the encouraging of voluntary groups and organizations in the discovery of better ways for individuals and communities to relate to the larger public institutions, both governmental and industrial. In addition, the task force would be in a position, as northerners, to consider new standards for the delivery of services to the towns and unorganized communities and districts across northern Ontario.

3) Finally, I recommended a tri-partite body composed of federal, provincial and Indian members to deal with the outstanding and unresolved issues of the status of Indian people. Due to the unique constitutional position of native people, it is necessary to involve both levels of government in such deliberations. (emphasis added)

What became clear from the early work of the Commission was that a new awareness of the finite character of our northern resources has developed. That timber and mineral ores cannot be forever exploited and carted away without rebuilding renewable resources and that our native people, in particular, feel helpless in the face of what is being done to their environment, their land and its resources.

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Mr. Justice E.P. Hartt's acceptance of his appointment as Commissioner, to work with the federal and provincial governments and the Indian people in a decision-oriented tri-partite process and known as the Indian Commission of Ontario, put an end to the first phase of the Royal Commission on the Northern Environment.

Thus, what we may call the second phase of this Commission under the Chairmanship of John Edwin Fahlgren began on August 2, 1978.

Now in its seventh year, this Commission seems to be operating in a political climate of sharpening controversies on many and varied issues of economic, political, social and moral consequence. Anyone, or more, of the specific issues confronting this Commission can easily stir up a political storm with strong racial overtones, since the majority of the people north of the 50th parallel of latitude in Ontario happen to be Native people. This is something real that must be faced up to and overcome by tackling it head-on. The current controversy over fishing rights across Ontario proves, that the compelling force behind the quest for capitalist profit is the spark that sets off the storm simmering beneath the surface in our capitalist environment. The roots of this issue are to be found deep in our historical past.

European settlement and capitalist industrialization in Canada were carried through at the expense of its original inhabitants. The Indian, Metis and Innuite peoples were robbed of their lands and herded into reservations. They were denied equal rights of citizenship and of self-government. The oppression of the Indian, Metis and Innuite peoples is continuing to disgrace Canada and must be abolished and the rights of the Native Peoples

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fully restored. It is the duty of all democratic Canadians to help win recognition of their identities as peoples. The government-ward system must be abolished and they must have full political equality, including the right to decide on all measures relating to their distinctive development.

In place of an official state policy that discriminates against our native peoples we must develop new governmental relations with the Indians, Metis and Innuait peoples. Any and all developments of the North must come through consultation and agreement with the people concerned.

This can be done on the basis of establishment of genuine Canadian control through public ownership and democratic control of all the resources of the areas concerned.

The Communist Party of Canada supports fully the just demands of Canada's Native Peoples for meaningful settlement of their land and environmental claims.

#### Toward Self-determination for our Native Peoples

The federal and provincial governments, in their negotiations with the Indian, Metis and Innuait peoples, must take as the starting point the right of these peoples to collective ownership of the lands of their forefathers in all areas where no treaty rights exist, as well as where such treaties do exist. The Federal Government and the Ministry of Indian Affairs and Northern Development have not given up their objective of dissolution of Indian reserves. Reserve lands near centres of population are coveted by greedy developers.

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Government policy, while moving partially away from a past stance of cold indifference and callous neglect, is based on tokenism and refusal to face up to the real issue - recognition of the distinct identity of the Indian, Metis and Innuait people as peoples and their rights contingent thereto.

The struggles of the Native Peoples in defense of their identities, rights and economic needs and human dignity will certainly triumph. The most advanced elements among them, particularly those in the labor movement and the young generation, are refusing any longer to accept the intolerable indignities imposed upon them under the colonialist Indian Act.

The just cause of the Native Peoples will triumph as a result of their own militant struggles in the political arena, both parliamentary and extra-parliamentary, which will take a number of forms including court actions. Decisive in this respect is the forging of a high level of unity within their own ranks and the active support of the broadest sections of democratic Canadians, and above all the organized labor movement.

While supporting fully the just demands of the Native Peoples The Communist Party stands for:

\*Meaningful compensation for the land and natural wealth the Native Peoples were robbed of in the past;

\*The right of the Indian and Innuait peoples to collective ownership of the lands of their forefathers in all areas where no treaty rights exist and their right to participate in decisions with respect to economic development of their lands and the natural resources thereon and to their rightful share in the income derived from such development programs and projects;

...cont'd.

\*Full recognition of their national identity and full rights to their language and culture;

\*All treaty rights to be strictly adhered to, regional self-government with full power of decision-making on all questions pertaining to their affairs as Native Peoples:

\*Massive economic and social programs to bring the Native Peoples' living, health, housing and education standards, training and job opportunities up to accepted Canadian standards;

\*Rooting out of all form and practices of racism and discrimination, full equality before the law and in society;

\*Abolition of the government-ward system and revision of the Indian Act in conformity with the wishes of the Indian people.

#### People and the Environment

Damage to the environment and the effects of pollution are today one of the big themes on the agenda which is causing serious concern throughout the world. A couple of examples:

In the late Sixties and early Seventies a new disease named "Minamata" appeared in Japan. The disease was found to attack the central nervous system, causing paralysis of the arms and legs, speech difficulties and loss of sight. Dozens of people were paralyzed or died after eating fish contaminated by mercury waste poured out by a factory in their neighborhood.

Almost at the same period, the Grassy Narrows Indian Reserve in Ontario, Canada, was almost dealt a death blow with the discovery that the English-Wabigoon river system - a source of food, employment and a cultural wellspring - was poisoned by mercury from a Dryden, Ontario paper mill. The paper mill owned by Reed Ltd.,

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was later sold to Great Lakes Paper in 1979, at which time the Ontario Government "agreed to pick up any liability for past pollution in excess of \$15 Million", according to a story by Ken McQueen in the Toronto Globe and Mail on January 12, 1983.

These are only two examples of thousands or millions to be found on a worldwide scale.

In a study called, "The Limits of Growth" drawn up by the Massachusetts Institute of Technology on behalf of the Club of Rome, we can read the apocalyptical predictions according to which the world is moving towards a catastrophe and the first fall is predicted for around the year 2,000. In any case before the year 2,100 we must expect a catastrophic fall in the population due to an increase in pollution and the exhaustion of the earth's resources.

In this alleged state of affairs, there are those who wish to hold back progress through some moratorium on development and turning the clock back via a policy of so-called "zero growth".

In reality, the problem is not to hold back the growth of the productive forces, but to ensure their progress by means of efficient and long-term social management in the interests of humanity.

However, such an idea is completely foreign to the big corporate fraternity. Capital has a proprietorial attitude towards nature which is quite devoid of conscience. The race for profits leads to a deformed development of productive forces and to an anarchistic extension of industry to the countryside. Capitalist production, wrote Karl Marx, does not develop technique and combine the social process of production except by undermining at the same time the source of all wealth - land and the worker.

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All the same, there are some fields in which the problem of the environment does not leave the capitalist investor indifferent. The biosphere interests capital to the extent that it is on it that the cost of labor power depends and the possibility of reproducing it.

Furthermore, as long as capitalist investors can increase their profits without suffering from the growing pollution of the environment, this problem does not worry them too much. It is only when its own system's physical and social existence is threatened that it demonstrates a desire to seek partial solutions corresponding to its capitalist nature. Capital draws profits both from the protection and the destruction of the environment by developing a new branch of production and seeking to have it financed by the state, which makes the workers pay for "pure water" and "pure air" through the tax system. In other words, pollution becomes big business.

Our neighbor to the north - the USSR - has developed its northern areas to the point of building cities like Norilsk on permafrost. Its fragile environment is much like that of ours in northern Ontario and elsewhere in Canada. We should welcome and encourage exchanges between Canada and the USSR in this particular area of expertise and common concern concerning development of resources in ways that benefit the people. The difference between us and the Soviet Union with respect to social and economic systems is not an insurmountable obstacle if there is a will to do it, as Farley Mowat, the author of "People of the Deer" can attest to.

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In the Soviet Union, as in other socialist countries, prevention of the pollution of the environment, like the long-term rational use of natural resources, follows organically from the essence of the socialist system and becomes a task of the state, on which depends the successful fulfillment of the national economic plans and the well being of the present and future generations.

Definite steps in the protection of nature are also taken in capitalist countries. A fundamental obstacle to their realization however, is provided by the contradiction between the interests of the owners of enterprises which pollute the environment and of the population which suffers as a result.

Economic and moral problems are inextricably bound together. The world's material crisis is reflected in a moral crisis. The trouble with most ethical systems is that they have divorced judgment of virtue and right conduct from the social setting in which alone they can have any meaning.

Socialism, rather than leaving ethical considerations out of the picture, represents a fusion of objective social science and the highest ethical ideals of the ages.

Capitalism, presents a different picture. Here moral judgments are largely irrelevant and meaningless. The nature of the economy imposes certain limits on the best of intentions and operates totally irrespective of human values.

Ontario's Environmental Assessment Act, under which this Commission operates, seem to suffer from such limits on best of intentions. The vast majority of developments appear to be exempted from assessment under this act.

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The Ministry of Natural Resources seems to bypass its own legislation and the environmental Assessment process, as in the case of the 'Road to Detour Lake' in Northeastern Ontario, and in its approval of a strategic land use plan for Northwestern Ontario without any meaningful reference to this Commission.

Perhaps, just perhaps, Donald McAlpine's contentions about inaccurate timber estimates should be looked into a bit more closely by this Royal Commission, if it has not already done so. Even a cursory glance at the figures produced in the department's forecast of timber growth and allowable cuts is enough to produce most skeptical reflections in ones mind about the reality of those forecasts.

#### A Pulp and Paper Monopoly

If we go back as far as 1947 and look at Chapter XXI of the Report of the Royal Commission on Forestry of that day, headed by the distinguished Major General Howard Kennedy, C.B.E., M.C., B.Sc. (McGill), we find the following:

(1) "I do not consider that it is, or ever will be, possible to achieve the rational development of forest resources or to maintain our present industries under the existing plan of limit allocation, with the confusing and conflicting agreements and condition in force...

(5) "Many people on both sides of the international border believe that there are still vast areas of virgin timber awaiting development. I regret to say that the only area in which I have found any considerable quantity of mature timber in blocks of considerable extent, outside areas covered by existing licenses and agreements,

...cont'd.

is IN THE PATRICIA REGION, NORTH OF LAC SEUL....(emphasis added)

(9) "There is a widespread feeling that some individual operators have been favoured more than others and that departmental action has been slanted to the benefit of some groups. The text of Chapters IX and XV gives substance to complaints on this score..."

Being now in the fourth decade of nibbling away through single-purpose operations by pulp and paper companies in this very area of Northwestern Ontario, can we afford to ignore this early warning of over-exploitation and the rapidly approaching end of merchantable timber in our province?

Moreover, the newsprint industry uses mainly spruce and balsam fir to this day, and grind sawlogs, railway ties, mining timber, poles and everything else into pulp or newsprint to the exclusion of other, even more valuable products.

To liberate our province from this single-purpose pulp and paper monopoly, it is now necessary for the government to establish Crown Corporations, state-owned and democratically controlled, for the purpose of reclaiming control of our resources, bringing order out of chaos, developing new multi-purpose harvesting of timber along with a massive program of reforestation and regeneration of our renewable resources. This calls for democratic nationalization as well as democratic control, with veto rights over development by the native peoples in their own territories.

The present political form of forest administration in this province is antiquated and intolerable. It is bureaucratic in the extreme, slipshod, clumsy and inefficient. The present method of forest administration is to grant concession after concession to private capital, without any effective control of forestry operations that follow.

It is a basic fact that trees are a longterm crop that must be reasonably harvested and not mined if we are to have security of employment, income and supply. The ground rent, fire tax and stumpage fees collected from concessionaires are simply token. Not the slightest worry seem apparent about replenishing the capital stock of renewable resources that provide the revenue, pitiful as it is. What enterprise can possibly carry on in that fashion and hope to survive under any form of economic or political system?

As the Lumber and Sawmill Workers Union pointed out to the Kennedy Commission in 1946: "We most definitely have no grievances concerning the efficiency or the qualifications of the technical personnel of the department (Lands and Forests - at that time). But it is and has always been inadequate. We submit that this is the direct result of seeking immediate revenue to the exclusion of proper and careful preservation of the forests that produce the revenue. This is a short-sighted and asinine policy. Adequate finances can be obtained from our public forest resources to employ a sufficient number of skilled personnel at salaries that will compare favourably with the salaries offered such trained personnel by private industry".

More and more revenue must be directed toward the immediate job of surveying our resources, to produce sufficient and modern equipments needed, expansion of research in the use of wood and an end to wasteful exploitation, and last but not least, to bring about an entirely new policy based upon effective silviculture, conservation and efficient management on a permanent basis.

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Without a serious and adequate knowledge of the extent of our resources, their quality and value, it is senseless and hypocritical to speak of supplies in perpetuity, or of "sustained yield" operations. We are confident that experts in forestry working in the field are fully aware of the falsity of such misleading phrases under prevailing conditions. At the same time they are reluctant to speak their minds, subject as they are to dictates from above. There were cases in the 1930's when qualified technical personnel were unjustly dismissed. A recent case in Thunder Bay district comes to mind in this connection, in 1982. This is intolerable and must be exposed and eliminated.

#### Forest Management Agreements - A Hoax

The recent Forest Management Agreements (FMA), so called by the Ontario Ministry of Natural Resources, are supposed to establish a principle that timber harvests should be carried out on a "sustained yield" basis.

But the concept of "allowable" annual cut" (AAC), bears no relation to "average annual growth" (AAG) which it must do if "sustained yield" is to be obtained.

The problem becomes even more serious when - on top of the most unscrupulous exploitation by profit-hungry capitalist investors - we add natural calamities such as forest fires and insect infestation. In fact one report, by F.L.C. Reed and Associates, projects a drastic drop in wood fibre supply in all regions of Ontario.

However, this does not find any reflection in the recommended annual timber harvest put forward by the Ministry of Natural Resources in its Strategic Land Use Plan, known as (SLUP) for short. In it, the recommendation is for drastic increases in timber cutting.

Not satisfied with this, the Federal Department of Regional Economic Expansion (DREE) and Ontario's Board of Industrial Leadership Development (BILD) are throwing \$170 million dollars into Ontario pulp and paper companies for modernization and expansion of their production facilities.

Consider that the Great Lakes mill consumes 5,000 cords of wood per day. It presently leases a total of 21,385 square miles of timber land, including the Dryden Mill woodlands. In mid-70's Canadian Pacific Investments (CPI) purchased controlling interest (52%) in Great Lakes. The CPI is 99% owned by Canadian Pacific Ltd.

Abitibi Price Limited owns and leases a total of 5,200 square miles of woodlands. It was bought up by Olympia-York Development of Toronto in 1981. The price was \$530 million for which it gained control of over 90% of Abitibi-Price shares. At the time of purchase Abitibi-Price assets stood as \$1.4 billion and sales at \$1.4 billion for 1980.

The recent period has been one of super-profit for the paper industry. The decline of the Canadian dollar brought a windfall of profits through the exchange rate on exports. In 1977 Great Lakes earned \$8.1 million in such windfall profits. Since then this company has improved such earnings by 50 to 85% each year.

The mergers and centralization of capital in the industry is proceeding apace. Government grants and windfall profits are going toward modernization of productive facilities to make the industry even more profitable for capital investors.

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In this process, workers are losing their jobs, the native people's lives are being ruined, the forests disappear and nothing is going back into reforestation and forest management to assure the sustained yield we hear so much about.

What conclusion must we draw from this?

Obviously, the time is here to call for an end to this course that takes us nowhere except to disaster.

We have already advanced a program for the native people in Canada, for their right to self-determination and for an end to racism and prejudice.

It is obvious, and has been so for a long time, that growing monopoly control by private capital in development of natural resources is not in the best interests of Canada and its people.

#### Some Conclusions and Proposals:

(1) Ontario must bring pressure to bear on Ottawa and the U.S.A. through the International Joint Commission to put an end to, and take steps to deal with, the consequences of acid rain and all forms of environmental pollution.

(2) The settlement of Native People's land claims and their full involvement in northern resources and industrial development must include veto rights on all such development in their own territories, as well as provide for their traditional hunting and fishing rights.

(3) Affirmative action programs to bring Native peoples housing, jobs and services up to provincial standards.

(4) Put an end to the domination by the Pulp and Paper Cartel by nationalization of the industry's facilities and the creation of a publicly owned and democratically controlled pulp and paper industry.

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(5) A program of massive reforestation to restore depleted forestry resources.

(6) Restore the right to strike and free collective bargaining in a Bill of Rights for Labor, including a 32-hour week at 40-hours pay.

(7) Environmentally sensitive mega-projects, such as the contemplated Polar Gas pipeline and Onakawana Development Limited's proposal to strip-mine lignite brown coal deposits north of Cochrane will not benefit the people of Ontario and Canada, except as publicly owned and operated developments under democratic control.

(8) Diversify the timber industry and develop manufacturing, incl. a machine building industry to supply forestry and mining.

Respectfully submitted by:

The Communist Party of Canada (Ontario)



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Rec'd Feb. 8/83

Conservation  
Publications

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THE CONFEDERATION COLLEGE OF APPLIED ARTS & TECHNOLOGY

SUBMISSION

TO

ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

ADULT EDUCATION NEEDS IN NORTHERN ONTARIO

JANUARY, 1983

## ABSTRACT

In this submission, we review the general guidelines of the Royal Commission on the Northern Environment. We include the general Mission Statement of Confederation College and identify the area served by the College. We provide a brief overview of past programming related to the areas and peoples "North of 50". We look at some of the educational needs related to the North and identify potential areas for the continued involvement of Confederation College.

## ADULT EDUCATION NEEDS IN NORTHERN ONTARIO

### 1. Guidelines: Royal Commission On The Northern Environment

The Honourable The Minister of the Environment recommends that the Honourable Mr. Justice Patrick Hartt, a Justice of the Supreme Court of Ontario, be appointed a commission pursuant to the provisions of The Public Inquiries Act, 1971, effective the 13th day of July, 1977:

1. to inquire into any beneficial and adverse effects on the environment as defined in Schedule A, for the people of Ontario of any public or private enterprise, which, in the opinion of the commission, is a major enterprise north or generally north of the 50th parallel of north latitude, such as those related to harvesting, supply and use of timber resources, mining, milling, smelting, oil and gas extraction, hydro-electric development, nuclear power development, water use, tourism and recreation, transportation, communications or pipelines;
2. To inquire into methods that should be used in the future to assess, evaluate and make decisions concerning the effects on the environment of such major enterprises;
3. to investigate the feasibility and desirability of alternative undertakings north or generally north of the 50th parallel of north latitude, for the benefit of the environment as defined in Schedule A.

### SCHEDULE A

"Environment" means,

- (i) air, land or water,
  - (ii) plant and animal life, including man,
  - (iii) the social, economic and cultural conditions that influence the life of man or a community,
  - (iv) any building, structure, machine or other device or thing made by man,
  - (v) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from the activities of man,
- or
- (vi) any part or combination of the foregoing and the interrelationships between any two or more of them,
- in or of Ontario.

2. Confederation College Mission Statement

Confederation College will respond to the changing educational, recreational, cultural, and social needs of the people of Northwestern Ontario. The human and physical resources of the College are available to assist the community in meeting these needs.

The College will offer all feasible vocational and avocational programs and subjects which are not in conflict with the educational responsibilities exclusive to other institutions. Career-oriented education for adults who require new skills or an upgrading of their current skills will be emphasized.

The College accepts a fundamental commitment to the growth of each student. The College will complement its primary goal, vocational development, with studies and an environment that engender personal growth and enable students to contribute their unique talents to a changing society.

3. Geographic Area Served By Confederation College

Confederation College serves the three Northwestern Ontario Districts: Rainy River, Kenora and Thunder Bay. Approximately 83% of the land mass of Ontario north of 50 falls within Confederation College territory.

(Please see attached maps: Appendix A: Confederation College Geographic Area

Appendix B: Indian Reserves in the Confederation College area



#### 4. Program Overview

##### (a) Programs operated North of 50

During the period 1969-1982, Confederation College has offered, throughout the area North of 50, programs of the following types:

- Academic Upgrading -- Level 1-1V
- Business and Commerce Training in --
  - (i) Stenographic Skills
  - (ii) Bookkeeping
  - (iii) Typing Upgrading
- Community Improver
  - (i) Carpentry
  - (ii) Log House Construction
  - (iii) Electrical
  - (iv) Welding
  - (v) Sewer and Water Maintenance
- Sawmill Operation
- Tourist Services
  - (i) Tourist Camp Operation
  - (ii) Guiding
- Mine Development
  - (i) Designed and delivered a mine opening program
  - (ii) Mine closure program
- Electrical Upgrading for electricians in the mines
- Band Management Training
- Ambulance Attendants
- Fur Clothing and Crafts
- Trapping and Fur Preparation
- Park Development
  - (i) Designed and advised on construction of a community park
- Nursing Assistants
- Small Motor Repairs and Maintenance
- Small Business Management
- Orientation to Employment
  - (i) Career Selection
- Cutter/Skidder
- Heavy Equipment Operator
  - (i) Including grader training for airport maintenance

4. Cont'd..

(b) Programs with participants from North of 50

Each year more students from the area North of 50 are enrolling in College programs at the main campus in Thunder Bay. They take advantage of the wide range of career-oriented programs available and select those that are most suitable for their interests and skills. In addition, the College is offering in Thunder Bay, a growing number of programs of particular interest to native people North of 50. These programs include: Native Community Worker, Native Alcoholism Worker and Special Native Preparatory Program (General Arts and Science).

5. Needs For The Future

There are two general areas where development activities are required in communities North of 50:

- (i) Community Infrastructure
- (ii) Economic Development

Community Infrastructure

The long term goal of a community infrastructure development program would be to develop within the community the skills required to meet community needs. The alternative is to import skills (and export profit) at great expense to the community. Example services include: general store, coffee shop, appliance maintenance, road and sewer construction, hairdressing, administrative management, health services, and, education.

Economic Development

It is important that the people North of 50 have some opportunity to get involved in economic development projects in the area. Get involved through jobs, management and ownership.

6. Educational Programs For The Future

Confederation College will continue to provide services to meet the types of needs outlined above and is willing to provide a variety of suitable programs. We envisage major participation in the following program areas:

6. Cont'd..

(a) Project Management

Confederation College will consult with Business or Government Departments intending to operate projects in the North. We are able to provide advice and assistance related to working with community groups, dealing with regulatory agencies and providing appropriate orientation programs for community and staff.

(b) Training Residents from North of 50 for Job Skills

Confederation College can review projects recommended by town councils, Indian band councils, treaty organizations, government services or industrial development companies in order to identify the skills needed in the following areas:

- Management
- Trade Skills
- Service areas skills
- Spin-off business possibilities (services, supply, etc.)

We can then design and deliver appropriate training programs.

Confederation College can analyze present projects to determine the need locally for management staff, skilled workers and service workers. Here again we are able to follow-up with appropriate training packages.

(c) Training Programs For People Moving North

Confederation College can deliver programs on cultural awareness for people working in the north. New staff being recruited throughout Canada and U.S. can be oriented to the culture in the communities as part of the pre-employment procedures.

Successful Native Employment Projects in Canada is a program Confederation College can offer for economic development officers going to work in the north. An initial analysis of the techniques used to establish successful native projects in Canada.

"Published by Confederation College, April, 1981".

6. Cont'd..

(d) Providing Community Education (Quality of Life) For Residents of Communities North of 50

In developing a plan for the future our attention is invariably focused on economic development and employment skills. It is to be recognized that regardless of the economic situation in each settlement or community, the core residents require life skills and enrichment programs. Finances and policy decisions must be arranged to deliver the Quality of Life programs required for the communities - e.g. sewing, cultural programs, cooking, stamp collecting, rock collections, painting, curling, hockey, baseball, etc.

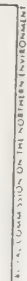
All communities served by the College where Quality of Life programs are offered, at some time express concern about the offerings, "but" when attracting people to the job opportunities orienting people to their own community or attracting people to live in the community, the final concern is "what recreational evening activities are offered in the community".

Jobs attract people but Quality of Life factors keep them in the communities North of 50.

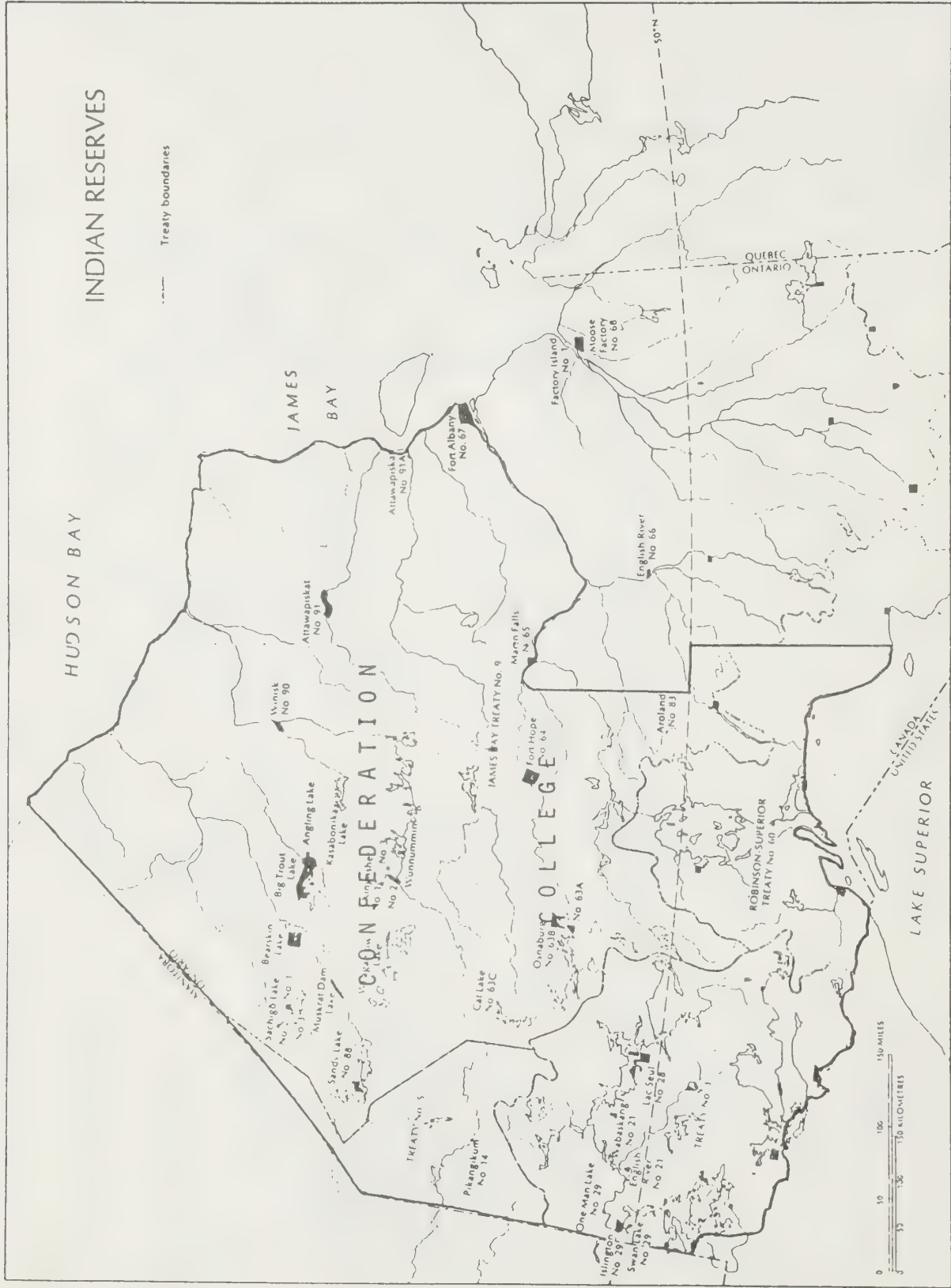
7. Conclusion

Confederation College is part of the Northern Environment. We intend to continue developing our skills to serve the people of the North for the long term benefit of Ontario and Canada.





Note: Wfnisk, Attawapiskat, Kashechewan and Fort Albany are served by Northern College



SURVEY COMMISSION ON THE NORTHWEST TERRITORIES

NOTE: The numbers assigned to certain Reserves were designated by Dept. of Indian Affairs and Northern Development for identification purposes under the Treaties

APPENDIX B - Indian Reserves in the Confederation College area

CASPN  
21  
17/12/82

FEB 10 1983

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9 February 1983

The Royal Commission On The  
Northern Environment,  
261 Third Avenue,  
Timmins, Ontario.

Attention: Ms. Ruth Burkholder

Dear Ms. Burkholder:

Re: M.N.R. Submission

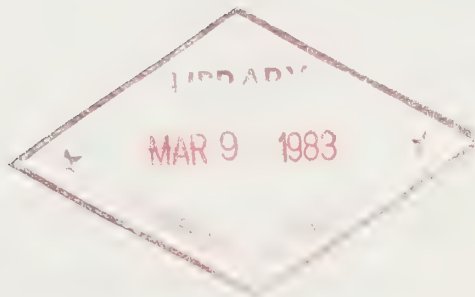
Please consider the submission which I prepared  
to the Ministry of Natural Resources concerning land use  
planning in the District of Timmins a submission for the  
purposes of your Commission.

Yours very truly,



Philip S. Gibson

1100 Gatineau Blvd.,  
Timmins, Ontario.



ADDRESSED TO MINISTRY OF NATURAL RESOURCES

A. F. Papineau, District Manager, Timmins District and to the Minister of Natural Resources The Honourable Alan Pope.

Re: Timmins District Land Use Plan

I wish to make certain comments concerning the Land Use Planning Process and the Timmins District Land Options. I am not an expert but have read the Ministry Blue Book, the Monzon Report, the Background Information Book and Plan Options for the Timmins District.

#### THE LAND USE PLANNING PROCESS

This process started in the early 1970's with eight years preparation of the SLUP which allowed 4 years to consider the information documents and 2 years to consider the initial draft plan. I do not understand the rush with DLUP. Why is there only four weeks for written submissions after the Open Houses? Why must the final decision be made before December 31st, 1982? This is a twenty year plan and as the effects of forest extraction itself will last for one hundred years, the rush to complete the most detailed part of the planning process when the most detailed study is required does not make sense. I understand that these Land Use Plans may be plans within the meaning of the Environmental Assessment Act and that there is some form of exemption from Assessment Hearings which will expire December 31st, 1982. If this is the case, is this the reason for the rush?

.../2



The haste leaves no time to educate the public; to analyse points of view or to study and comment in detail on the plan. MNR advertising has not educated the public concerning the options but rather has advised the public that if it has anything to say, it had better hurry up and say it.

The MNR prefers dealing with the public in Open Houses. This method is very friendly and some what like a "show and tell". However most information presented at the Open House is presented for the first time and it is very difficult to make reasoned inquiries at that time. In fact looking at options A and B at the Timmins Open House was something like looking at two pizzas. There is no method for testing or challenging MNR statements subsequent to the Open Houses as the communication is all one way i.e. the public can write to MNR but there is nothing to say MNR will respond. Will the MNR release statistics as to attendance at the Open Houses? Will it release a summary of comments received subsequent to the Open Houses and identify what changes have been made as a result of the comments?

I am given to believe that the methodology and scientific framework for establishing parks in Ontario is second to none. The break down appears to be in translating the goals and research into parks and this relates directly to the political power of the Parks Branch in relation to Timber and Mines.

In general the Parks Branch appears to be the weakest of the three branches. For example, the efforts of the Parks Branch to support the Lady Evelyn Wilderness Candidate Park at public meetings in Temiskaming were very weak. It seems the public perception of Parks is that they are frivolous and do not create jobs. The Parks Branch should be taking active steps to counteract that perception through public relations and research as to the economic value of parks.

As a further example, Candidate Parks remain open for mineral exploration and timber extraction. This will delay the creation of parks until after mining and timber industries are finished with the proposed park and will reduce the suitable area available for parks. This really says to the public that if the land isn't good for anything else it might be good enough for a park. This policy of allowing continued extraction and "sequential multiple use" seems to mean that when the extraction industries are finished the campers and picnickers can use the stump

It should be noted that while parks proposals are subject to public debate, Forest Management Agreements are not. The Open Houses which were held in this area were to explain the Forest Management Agreements which had already been signed. The Open Houses were in the towns most effected locally. While this appears to be logical, the local communitties are most likely not to "see the forest for the trees". As well, there isn't much to be sai

once the agreement has been signed.

Recently the Minister has been reported in the Timmins Press as favouring "privatization of parks". Parks Branch should oppose any such move; first on the basis that private parks operators do not have the same objectives as Parks Branch of MNR concerning protection and preservation of the environment and secondly private park operators do not have the resources that MNR has to maintain parks.

#### THE PLAN OPTIONS

The options are difficult to compare as the numbered areas do not match. It is difficult to know what "mineral exploration will be encouraged", "shoreline damage will be minimized", "modified management techniques", "forest regeneration will be incurred" mean. Specifically concerning parks, there is reference in the background materials to thirteen historical and archalogical sites but there are none in the options as Candidate Parks. This is suprising as the historical parks targets for the Northern District are not met. There is no explanation of what happened to the earth science Candidate in Tisdale Township or for that matter what the earth science Candidate consisted of. Similarly the nature reserve Candidate in Whitney Township referred to in the background materials does not appear in the option, without explanation.

There are several canoe routes mentioned in the Background

Information but the Land Use Plan Options contain no water way parks to protect the routes. There is no explanation as to why there are different shoreline reserves for different lakes. It is not possible reading the Options to relate the Timmins District's contribution to SLUP North East; nor is it possible to tell how the Options fit in the overall scheme of plans or of the Monzon Report. One cannot tell if the Timmins District is pulling it's weight.

I make these comments without any pretenses of being an expert in park plans. I am concerned about the Land Use Planning Process and the preservation of our natural resources for the future.



Rec'd FEB 10 1983

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*La Corporation de la Ville de Hearst*

**THE CORPORATION OF THE TOWN OF HEARST**

925, Rue Alexandra Street  
HEARST, ONTARIO

February 8, 1983

Please quote our File  
PL-1012-83-1

Commissioner J.E.J. Fahlgren  
The Royal Commission on the Northern Environment  
261 Third Avenue  
Timmins, Ontario  
P4N 1E2

Dear Mr. Fahlgren:

On behalf of the Hearst Planning Board, I would like to submit the attached report which identifies the Board's concerns about several of the land use policies contained in the Ministry of Natural Resource's proposed document Hearst District Land Use Plan. (A copy of the Ministry's document is also enclosed). Although some of the points raised by the Board do not fall entirely within the jurisdiction of MNR, these issues are nonetheless responsibilities of our government - either at the Provincial or the Federal level. We feel that our concerns are serious and warrant the attention of your Commission.

In way of background, a special committee of Planning Board was formed in July 1982 to examine the proposed MNR Land Use Plan for the Hearst District. This committee identified several problem areas within the document and made suggestions for their resolution. The committee's findings were discussed during a regular meeting of the Board on August 12, 1982, and a recommendation was made to the Council of the Corporation of the Town of Hearst, to accept the committee's report and to follow up the suggestions with the Minister of Natural Resources. Council adopted the recommendation, and the committee's comments were forwarded to the Hearst District office of MNR. Subsequently, a meeting was held with MNR personnel and Board members in order that the Board's concerns might be addressed. The appended report MNR Hearst District Land Use Plan: Proposed Policy and Planning Options reflects both the committee's report to the Board, and the discussion with MNR people on September 13, 1982. It is my understanding that the issues raised during these meetings have been brought to the attention of the Honourable Alan Pope by the local district office.



...2/

J.E.J. Fahlgren

February 8, 1983

Generally speaking the discussion with MNR proved satisfactory. However, there are still several outstanding issues that remain unresolved. It is these issues, from the following report, that we direct to your attention:

- 1) lack of public input into the plan's amendment procedure;
- 2) lack of avenue for appeal;
- 3) lack of control of rehabilitation of pit and quarry sites;
- 4) lack of control over forest management on private lands;
- 5) lack of Crown Land timber allocations to local sawmills;
- 6) lack of incentive for agricultural growth; and
- 7) growing foreign ownership of rural properties in the Hearst Area.

We thank you for this opportunity of voicing our concerns about MNR planning policies in northern Ontario. Your efforts to preserve and maintain a better environment for all of northern Ontario are to be applauded.

Yours truly,

*J Newsome*

Ms. Jan Newsome,  
Secretary-Treasurer,  
Hearst Planning Board.

JN/pl

encl.

MNR HEARST DISTRICT LAND USE PLAN:  
PROPOSED POLICY AND PLANNING OPTIONS

The following synopsis was composed from the minutes of two Hearst Planning Board meetings, held on August 12 and September 13, 1982. During the first meeting, the Board reviewed the proposed Ministry of Natural Resources' Hearst District Land Use Plan to identify problem areas, and to formulate solutions or suggestions. The latter meeting with MNR personnel, Mr. C. Emblin (Hearst District Manager) and Mr. D. Robb (Hearst District Planner), examined the Board's comments on the planning document, and provided a forum for MNR response to the Board's input.

Specific references are made below to the proposed policies in question, as they appear in MNR's Hearst District Land Use Plan: Proposed Policy and Planning Options, June 1982. Planning Board and MNR comments are summarized.

PLANNING PROCEDURES

MNR proposes to approve a District Plan (land use) having a major public review every 5 years. Major amendments to the Plan may be made from time to time with public review. On paper, this procedure appears to be similar to our own Official Plan and Zoning By-law or Minister's Order amendment process, however "minor plan amendments may be made at the discretion of the District Manager, and without a plan review" (pg. 6). There is no indication in the document as to what criteria would determine whether a change is to be considered as 'minor' or 'major' in nature. This exemption may also place District Managers in a very difficult position, as their decision to approve or refuse a minor adjustment to the plan will be made arbitrarily. No mention of an appeal mechanism appears in the plan.

Board suggestion: All amendments require public notification and circulation to various interested agencies, in much the same manner as The Planning Act provides.

MNR response: Major amendments will be required for new land uses or changes in policy. Major amendments are not expected to be required within the next few years. In an informal manner, MNR will inform the Board of all intentions to amend the plan. No response will be required from the Board, unless the Board has comments.

MINERAL MANAGEMENT

The Plan's policy will permit "mineral exploration in candidate parkland under controlled conditions" (pg. 25). Such activities, if controlled by existing regulations may effectively destroy fragile environments beyond rehabilitation. How does MNR propose to control this exploration? Will a 'find' eradicate the candidate status of a significant environment?

Board suggestion: Such activity should be excluded from all candidate areas until ultimate status is determined or until strict and effective control mechanisms are in place.

MNR response: It is necessary to maintain the value, for example - a unique plant community, of a park or candidate park. Any applications for exploration will be evaluated on their effect on park value. Limits can then be placed on the type of exploration to be conducted. In a park valued for plant life, perhaps only seismic exploration would be permitted. Information gathered may then influence the status of the park.

Aggregate deposits are given a priority land use status in critical agricultural areas - Casgrain and Devitt Townships. Incompatible uses are to be discouraged. "The appropriate treatment of existing pits and quarries . . . and critical aggregate area (is to be encouraged) through municipal mechanisms" (pg. 26). However, these mechanisms may only be applied to land uses within the boundaries of a municipality. In this case, Devitt Township is the only area having aggregate potential and municipal organization.

Board suggestion: For Casgrain and Devitt Townships, extraction of aggregate materials should be considered on a case by case basis - on the merits of the developer's rehabilitation program. It is essential that the land be restored for future agricultural use. Agriculture is a long term use, while extraction may only occur over a 10 to 20 year period. Minister's Orders have proven ineffective in controlling or requiring restoration of private lands in unorganized territory - particularly for sites existing prior to regulation approval. Implementation of The Pits and Quarries Act should be authorized for Northern Ontario.

MNR response: We are aware of the conflict, however,



these areas have critical aggregate sources and therefore guidelines will be developed having a dual purpose. Structural developments over deposits will be discouraged. Rehabilitation problems are a serious point. MNR has control over Crown Lands only, Planning Board has little control at the moment. The Ministry of Labour has jurisdiction over pit safety. The Pit and Quarry Act will eventually be replaced by The Aggregate Act - however, this is a long way off. Perhaps guidelines for rehabilitation might be included in the Official Plan. The Ministry of Agriculture & Food might also comment on the amendment from that point of view. This is a definite problem, and no solution seems to exist at the present time.

### FOREST MANAGEMENT

Large tracts of land within the District are patented by private timber companies. Use of such land is not controlled, but restoration is "encouraged" (pg. 27). A 'hands-off' attitude is held by the government towards these private lands. For the most part, entire townships were obtained through land grants originally given to the railways. What happens to these lands cannot be isolated, for our environment and our economy as a whole will eventually be affected.

Board suggestion: Restoration (regeneration) should be made the responsibility of those who use any natural resource. Private lands should be required to conform to some acceptable minimum standard, in much the same way that municipalities regulate minimum property standards on all properties within their boundaries.

MNR response: MNR is presently studying the private land situation. Minimum standards may be incorporated into this study, but it is not known at the present time how far this study will go. Private lands cannot be regulated in such a manner under the present MNR mandate.

Large tracts of Crown Land are distributed for cutting purposes. These lands have been traditionally delegated to large companies, such as Ontario Paper, which does not have a local base.

Board suggestion: MNR should consider local sawmills, which have a direct effect on our District's economy, as rightful recipients for some of the Crown Land allocations.

MNR response: Local sawmills have 20 year allocations met outside of this area, and which appear to be sufficient. Large companies have a definite impact on the whole district, for example Hornepayne. They are considered very beneficial.

#### AGRICULTURAL MANAGEMENT

This document emphasizes the importance of maintaining rural land in an agricultural designation, even though this land may only be required for this purpose in the distant future. This preservation shall be accomplished by endorsing "land use designations and severance policies which are compatible with agricultural use and are in conformity with the Provincial Foodland Guidelines" (pg. 28). This is an excellent position to take. However, most rural consents are from parents who wish to give a small part of their holdings to their children for residences.

Board suggestion: A meeting should be held with all agencies involved to formulate a consent policy which is realistic and which also takes into account the human interests involved. This policy will be incorporated into the Official Plan.

MNR response: The idea of an agency meeting is excellent. (Agriculture & Food, Planning Board, MNR)  
The consent policy should be definitely consolidated, and MNR will participate.

Agricultural expansion is viewed as infilling or extending existing agricultural lands. However, the Natural Resource designation of land use in our Official Plan for the Hearst Planning Area does not restrict any particular land's development solely for agricultural purposes.

Board suggestion: Organize a meeting of agencies concerned to pinpoint best areas for expansion, especially in consideration of ARDA properties and other Crown Land holdings.

MNR response: We have had meetings in the past concerning development of ARDA lands. These priorities will change according to lands required, but we would not oppose any consolidation of policy.

Future food production for the purpose of achieving self-reliance in beef production, etc. is not emphasized enough in this area. Many farms are being vacated and allowed to

become overgrown. Many other lots are purchased by foreign owners and are promptly forgotten or neglected. As a result once viable land requires extensive labour and financial input before it can be farmed again. Foreign ownership also prohibits any further usage of the land.

Board suggestion: The Ministry of Agriculture & Food should develop an effective incentive program to encourage new farming techniques, crop diversification, increased production and to return abandoned fields to production. Lands under foreign ownership should be made available for farming lease, etc. as a provision of the purchase agreement. These lands may then be maintained in a productive state (cleared) without decreasing property value for the owner.

MNR response: We would definitely support Agriculture & Food's programs for this purpose, as long as the forest land future is not jeopardized. Neither MNR nor the Province have any say in land purchase agreements to foreign owners.

#### FISHERIES AND WILDLIFE MANAGEMENT AND TOURISM

Much emphasis is placed on fisheries management and 'encouraging the relocation of fishing demand through such means as season adjustment and the provision or control of access' (pg. 30). By closing roads, however, MNR will effectively eliminate all other recreational activities on a lake.

Board suggestion: Road closure must be considered as a last resort - when all else fails. Concentration should be applied to specific management techniques, ie. spawning bed enhancement, stocking, setting daily limits, etc. Actively enforce seasonal and daily limits or protected species restrictions. Rod and gun clubs should be promoted and campaigns initiated for the utilization of other species.

It is encouraging to see that the moose overharvest is finally considered a serious problem.

Board suggestion: Several management techniques have been considered in the document, ie. transfer of hunting pressure to other game species such as bear, more regulation of the moose harvest, etc. Management of the moose herd should not be pursued in a haphazard manner, or applied in small doses, as it requires a great deal of time

to re-establish a population. If necessary, prohibit hunting for a period of years, then bring back a restricted harvest. The feasibility of commercial rearing of moose should be studied to ensure population and species propagation as well as utilizing a natural resource.

The Board concurred with MNR's land use proposals for tourism.

MNR response: (to all of the above) Because of the extent of interdependence between the environment and tourist camps, these topics will be dealt with together. Remote outfitters generate \$3 million to \$5 million annually. Road closure is only proposed in outfitter areas as these areas have been allocated for cutting. Roads are therefore necessary for access to the resource. The control of people entering an area is the most effective mean of controlling angling or hunting pressure. Unfortunately, MNR has tried almost every other method of dealing with this situation, but all have failed. Creel census is being undertaken on several lakes in the district (ie. Hearst Chain of Lakes) which may possibly require the review of existing lake management programs. The moose population in Unit 23 increased 26% because of the controlled hunt. This may be unique, and will be reviewed with regard to other provincial findings. In all, management programs are considered successful.

#### PROVINCIAL PARKS AND CROWN LAND RECREATION

Board comments: Controlled or selective cutting should be permitted land uses in provincial parks to enhance the environment, reduce fire hazard and encourage maximum utilization of the land. This must be strictly regulated. Patented lands should be regulated under the same policies as crown land is for recreational uses.

MNR response: Parks policies do permit cutting for park enhancement, etc. Patented land regulation requires cooperation with the land owner. There are many cases of established, good working relationships for this purpose, for example Newaygo.



COTTAGING

Board comments: Scattered cottage development is a priority. Selective cutting should be a permitted land use as in parkland areas. Rural residential conversion of cottages is a growing problem. Strict policy provisions must be incorporated into our planning documents and enforced.

MNR response: Cottage conversion to permanent households is recognized as a problem, and we will support efforts to discourage this trend. Future designated cottage lakes will be reviewed, and those lakes not promoting this type of occupation will be developed first.

PLANNING OPTIONS

The areas and options below, consist only of those having a direct interest to the Board.

## Area 1: Hearst Urban Area

Planning Option 2 permits cottaging and provincial parks as land uses.

Board comment: Cottaging increases demand for municipal services. Provincial parks may duplicate municipal recreational plans, which are already subsidized by the province.

MNR response: The Board is concerned about the possibility of MNR's promotion of cottaging or provincial parks in urban areas. Assurance is given that the final version of this plan will not permit these activities in the urban area.

## Area 3: Agricultural Resource Area

Option 1 requires strict regulation of extraction activities. Casgrain and Devitt Townships are considered as primary extraction areas by Option 2.

Board comment: As has been previously mentioned, pits and quarries should be considered temporary land uses, while agriculture should be viewed as the long term use. Until such time as better legislative controls are in place to regulate extraction activities, Casgrain and Devitt Townships should be considered as primary agricultural areas - as implied by

Option 1. Pits and quarries will be controlled more effectively if handled as amendments to the plan for each case.

MNR response: The problems associated with aggregate extraction are many. The difficulty in regulating any rehabilitation of existing sites or private sites, points out the need for progress on The Aggregate Act, because at the present time, only municipalities may require and approve site plan agreements with developers on private land.

#### Area 6: Aggregate Areas

Board comment: As above, the critical areas of Casgrain and Devitt Townships should be designated primary agricultural areas.

MNR response: Critical areas in Casgrain and Devitt will still be considered aggregate in priority. The Board must consider developing provisions for their preservation through some other means, for example the Minister's (Zoning) Order.

#### Area 11: Hearst Chain of Lakes

Both options recognize the recreational demands on these lakes.

Board comment: Are these lakes presently developed to their maximum capacity? Sports fishing is suffering directly from recreational demands due to their close proximity to Hearst and to the 140 cottages now existing on these lakes. The 37 approved additional cottage lots should be re-evaluated, especially those lots on Pivabiska Lake. A fisheries management program should be introduced immediately to preserve the walleye population. In view of this goal, commercial fishing may assist in establishing a better balance of species populations in the lakes

MNR response: Creel census results may lead to a new fisheries management program. At the moment, it is not possible to re-evaluate lake lots until this study has been completed.

Area 15: Rogers Road Recreation Area

Option 2 does not provide any recognition of this area.

Board comment: The string of glacial lakes in this area is a significant natural feature, and should be preserved. Planning Option 1 should be implemented to recognize this area for its recreational potential.

MNR response: The Board can be assured that this area will remain protected (adequate shore-line reserves, etc.) if designated in the general Resource Utilization Zone. All recommendations concerning recreational uses would apply.





Rec'd Feb. 15/83

HS  
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# CAT TRACK LODGE

IN THE WILDERNESS

SAVANNA LAKE, ONTARIO

February 9, 1983

Commissioner J. "Ed" J. Fahlgren  
215 Red River Rd.  
Suite 201  
Thunder Bay, Ontario P7B 1A5

Dear Mr. Fahlgren;

It would seem to me that there is more than a little lacking in the Program now being implemented to set up Guidelines for the intelligent use; and distribution of the Natural Resources NORTH of the 50th.

First off, somewhere "The Cart was placed before the Horse"; and by this I mean, if my understanding of the whole program is correct then Any and All Extensive use of the Natural Resources should have been curtailed at their present state, untill those Guidelines could be established.

However at this time there is at least one Industry Greedially consuming a vital Natural Resource, that other Major Industries virtually cannot exist without.

I speak of a Virgin Wilderness Forest, that to me is not a Renewable Resource. In fact it is an Irreplaceable Resource, strictly because Man has not yet devised a way to Recreate an Original Wilderness. The Untouched Wilderness, as a resource

I believe, has a Monetary value many times that of Timber Extraction; and would continue to be Monetarily Valuable many more years into the Future.

If in our Headlong Rush to gain a Dollar today, we destroy this Very Valuable Irreplaceable Resource, then we are only cheating ourselves; and all who follow, by our Very Short Sightedness.

Thousands of Soles have spent Millions of Dollars over the past number of years, Solely for the Privilege of enjoying a Wilderness Experience, in a Wilderness Envirment; and they will continue to pay for that Privilege as long as that Envirment is Available.

CLEAN AIR  
PURE WATER  
HORN GOOD  
FISHIN

LAKE  
TROUT  
BIG-UNS

WALLEYES  
SHADS  
OF MM

NORTHERN  
PIKE  
WHOPPERS

MOOSE  
A  
PLENTY

GRUBSE  
GALORE

# CAT TRACK LODGE

## IN THE WILDERNESS

SAVANT LAKE, ONTARIO

Page 2

When; and If, by so called Progress that Envirment is Radically changed, those Individuals will cese to be interested. Hence the loss to Society for Markiting a Resource that, Theoretically, is Never Ending. For very little has been extracted from that Resource; and yet the Revenue derived is very considerable.

For Years, this Wilderness North of the 50th has meant many different things to Many People. A way of life to some, a Haven for others; and a Base of operation for Many Small Industries that have taken little; and given much. It would seem that by reviewing History alone, it would be evident that this use could continue Indefinately, if given the Opportunity.

What then if decisions are made to Disregard the Wilderness as a Valueable Resource? And Timber Extraction is allowed to continue unabated, ~~what~~ what impact Ecologically will this have on our Future? In my opinion, there has not been nearly enough consideration given this crucial factor. It could; and very likely will, weigh heavily on every Creature in the North including Mankind.

This is not to imply that all other uses of our Natural Resource should be denied, but rather Redirected. And Especially at this time Curtailed, untill the proper Research has been accomplished to determine the extent of use this Wilderness can except. Without being Altered Physically past the point of No Return.

Sincerely,

Dale & Carol

Mr. & Mrs. Dale Staimbrook  
Savant Lake, Ontario P0V2S0

CLEAN AIR  
PURE WATER  
EARN GOOD  
FISHIN

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MR. COMMISSIONER:

I HAVE REQUESTED THIS OPPORTUNITY TO SPEAK BEFORE YOU BECAUSE IT IS MY WISH TO CONVEY, AS A CITIZEN OF ONTARIO, MY SUPPORT FOR YOUR UNDERTAKINGS, AND THOSE OF YOUR PREDECESSOR, SINCE THE ESTABLISHMENT OF THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT.

FIRST I MUST STRESS THAT MY STATEMENT IS THAT OF A PRIVATE CITIZEN, AND IN NO WAY REFLECTS ANY OPINION OR VIEWS OF MY EMPLOYER. HAVING SAID THAT, I WOULD LIKE TO MAKE BRIEF REFERENCE TO MY BACKGROUND. PRIOR TO MY PRESENT EMPLOYMENT, I WAS WITH THE FORMER DEPARTMENT OF TREASURY AND ECONOMICS AND ITS SUCCESSOR, THE MINISTRY OF TREASURY, ECONOMICS AND INTER-GOVERNMENTAL AFFAIRS. FROM 1969 TO 1973 I WAS A REGIONAL ADVISOR FOR NORTHEASTERN AND NORTHWESTERN ONTARIO WITH THAT DEPARTMENT, ASSOCIATED WITH THE SOCIAL AND ECONOMIC PLANNING OF THE REGIONAL DEVELOPMENT BRANCH AND THE DESIGN FOR DEVELOPMENT PROGRAM. I AM SURE THAT IN YOUR STUDIES YOU HAVE ENCOUNTERED THE STUDIES UNDERTAKEN BY THAT BRANCH OF THE ONTARIO GOVERNMENT.

I WAS BORN AND RAISED HERE IN THUNDER BAY AND HAVE LIVED IN VARIOUS NORTHERN COMMUNITIES, SUCH AS WHITE RIVER AND COBALT. ALTHOUGH I HAVE NEVER LIVED IN ANY COMMUNITY NORTH OF THE 50TH, AND THEREFORE AM FAMILIAR WITH THE STUDY AREA ONLY THROUGH MY VISITS TO THE RESERVES AND SETTLEMENTS IN THE STUDY AREA, I HAVE NOTED THAT SOME OF THE CRITICS OF YOUR COMMISSION ALSO RESIDE SOUTH OF 50.





IT IS NOT MY INTENTION, MR. COMMISSIONER, TO COMMENT TO ANY EXTENT ON WHAT DEVELOPMENT PROGRAMS SHOULD BE CARRIED OUT NORTH OF THE 50TH, NOR THE NECESSITY TO PUT IN PLACE THE PROPER ENVIORNMENTAL PROTECTION POLICIES RELATED THERETO. AND IT IS ASSUMED TO BE ONLY NATURAL THAT OUR FIRST PEOPLES WILL BE INVOLVED IN ANY DEVELOPMENT, AND THAT THEIR ENVIRONMENTAL CONCERNS WILL BE ADDRESSED AND PROTECTED, THAT THEY MAY CONTINUE TO LIVE THEIR LIVES, AS MUCH AS IS POSSIBLE, IN THE WAYS AND CUSTOMS OF THEIR FOREFATHERS, WITH SUCH CHANGES THERETO AS THEY SANCTION. THAT IS ONLY FAIR TO THE MAINTENANCE OF THEIR DIGNITY AS OUR ORIGINAL PEOPLES.

THESE PAST FEW MONTHS MUCH HAS BEEN SAID CONCERNING ABORIGINAL RIGHTS, AND I WOULD ASK THAT THE NON-INDIAN SOCIETY BE EVER AWARE THAT AS WE SETTLED THESE LANDS WE MADE CERTAIN GUARANTEES TO THE ORIGINAL INHABITANTS, AND I WOULD HOPE THAT THE FINAL REPORT OF YOUR COMMISSION WILL IN NO WAY BETRAY THAT TRUST. WE MAY BE, FOR LACK OF A BETTER TERM, THE DOMINANT SOCIETY, BUT WE MUST NOT BE THE DOMINEERING SOCIETY. THE PEOPLE OF THE FAR NORTH IN YOUR STUDY AREA, AND IN PARTICULAR THE NATIVE RESIDENTS, MUST HAVE THE OPPORTUNITY TO HAVE SIGNIFICANT AND MEANINGFUL INPUT AND PARTICIPATION IN ANY PROGRAMS OR PROJECTS WHICH COULD AFFECT THEIR SOCIAL AND ECONOMIC FUTURE. THEIRS IS A SOCIETY AND LIFE STYLE WHICH DESERVES TO BE PROTECTED.

I WOULD TURN FROM THESE STATEMENTS TO ADDRESS YOUR CRITICS.

I DO NOT INTEND TO LAUNCH A STATISTICAL WAR. BUT THERE



IS A MOUNTAIN OF STATISTICAL INFORMATION AVAILABLE TO SUPPORT WHAT I WILL SAY. THE INFORMATION IS PUBLIC, AND FOR THE MOST PART IS AVAILABLE AT LIBRARIES HERE IN THUNDER BAY.

YOUR COMMISSION HAS BEEN CRITICIZED FOR ITS EXPENSE, AND FOR THE LENGTH OF TIME IT HAS TAKEN TO COME TO ITS REPORT.

THE STUDY AREA FOR YOUR COMMISSION IS HUNDREDS OF THOUSANDS OF SQUARE MILES, 210,000 SQUARE MILES TO BE CLOSE TO PRECISE. MUCH OF THE AREA IS UNINHABITED. OUTSIDE OF A VERY FEW COMMUNITIES WE ARE TALKING OF AN AREA WITHOUT ANY FORM OF MUNICIPAL GOVERNMENT. THE RESOURCES OF THE AREA ARE RELATIVELY UNKNOWN. WE MAY SOMETIMES REFER TO IT AS "NOTHING BUT MOOSE PASTURE" BUT RECENT EXPERIENCE HAS SHOWN THAT "MOOSE PASTURE" CAN CONTAIN SUBSTANTIAL DEPOSITS OF GOLD.

FROM TIME TO TIME THE GOVERNMENT OF ONTARIO HAS SET UP STUDY AND PLANNING COMMISSIONS AND TASK FORCES TO PREPARE PLANS FOR SPECIFIC AREAS OF THE PROVINCE. TWO WHICH COME TO MIND ARE THE PARKWAY BELT WEST PLAN, COVERING 52,000 ACRES OR 82 SQUARE MILES, AND THE NIAGARA ESCARPMENT PLAN. THE FORMER PLANNING AREA EXTENDED FROM HAMILTON TO MARKHAM. IT TOOK WELL IN EXCESS OF FOUR YEARS TO PREPARE THE PLAN WHICH HIGHLIGHTED TRANSPORTATION AND COMMUNICATION CORRIDORS AND PUBLIC OPEN SPACE AREAS TO BE SET ASIDE TO SEPARATE THE UPPER AND LOWER TIER MUNICIPLAITIES IN THE PLANNING AREA, AND TO DESIGNATE CERTAIN NORTH-SOUTH GREEN BELTS WHICH WOULD ACT AS VISIBLE SEPARATION CORRIDORS BETWEEN SUCH PLACES AS

COVERING AN AREA OF APPROX 200,000 SQ. MI.

BURLINGTON, OAKVILLE, AND MISSISSAUGA. THE COST IS DIFFICULT TO ASCERTAIN AS MANY OF THE PLANNERS WERE SECONDED FROM THEIR USUAL TASKS IN A BROAD RANGE OF MINISTRIES, INCLUDING TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS, HOUSING, TRANSPORTATION AND COMMUNICATIONS, NATURAL RESOURCES, ENVIRONMENT, AS WELL AS ONTARIO HYDRO. IN ADDITION DIRECTORS AND EXECUTIVE DIRECTORS FROM THESE MINISTRIES AND AGENCIES HAD TO DEVOTE AT LEAST A HALF A DAY EACH WEEK TO THE PLANNING PROCESS. THERE WAS ALSO A MUNICIPAL ADVISORY COMMITTEE CONSISTING OF THE CHAIRMEN OF THE AFFECTED REGIONAL MUNICIPALITIES AND THEIR PLANNING DIRECTORS, AND A PRIVATE SECTOR ADVISORY COMMITTEE. IN THE FINAL STAGES OF PLAN PREPARATION, HEARINGS WERE HELD OVER A PERIOD OF THREE TO FOUR MONTHS. THESE HEARINGS WERE HELD FOUR OR FIVE DAYS A WEEK AND WERE PRESIDED OVER BY THREE MEMBERS OF THE ONTARIO MUNICIPAL BOARD.

THE OTHER COMMISSION I REFERRED TO, THE NIAGARA ESCARPMENT COMMISSION, IS CHARGED WITH THE PLANNING AREA FROM QUEENSTON TO TOBERMORY. THE COMMISSION IS A COMMISSION UNDER THE PROVINCIAL SECRETARIAT FOR RESOURCES DEVELOPMENT, AND REPORTS THROUGH THE HON. LORNE HENDERSON, PROVINCIAL SECRETARY. THE COMMISSION IS STUDYING AND PREPARING A PLAN RELATED TO THE LAND USE AND DEVELOPMENT ALONG THE NIAGARA ESCARPMENT. THIS COMMISSION HAS OFFICES IN GRIMSBY AND CLARKSBURG AS WELL AS ITS HEAD OFFICE IN GEORGETOWN. THE PLANNING PROCESS HAS BEEN GOING ON SINCE PRIOR TO THE ESTABLISHMENT OF THE COMMISSION IN 1973, AND ACCORDING TO THE FIGURES WHICH I OBTAINED FROM THE OFFICE OF THE PROVINCIAL AUDITOR, HAS COST SEVERAL MILLION DOLLARS MORE THAN YOUR COMMISSION. THIS PLAN HAS RECENTLY UNDERGONE THE PUBLIC SCRUTINY OF HEARINGS, AND I UNDERSTAND

THAT THE HEARING OFFICER'S 5,000 PAGE REPORT WILL SOON BE IN THE HANDS OF THE MEMBERS OF THE COMMISSION. AFTER REVIEW, AND MODIFICATION BASED ON THE HEARING OFFICER'S REPORT, THE PLAN WILL GO TO THE PROVINCIAL SECRETARY FOR RESOURCES DEVELOPMENT, AND THEN TO CABINET. THE PROCESS WILL TAKE SOME TIME.

IT IS TRUE THAT WE CANNOT SIT HERE AND COMPARE APPLES AND ORANGES. BUT MY POINT IS THIS. PLANNING COSTS MONEY AND TAKES TIME. IT IS BETTER TO LIVE WITH THE CRITICISM THAT YOUR COMMISSION HAS BEEN COSTLY AND TIME CONSUMING, THAN TO LIVE WITH THE CONSEQUENCES OF AN UNDERFINANCED AND RAPID ACTION STUDY WHICH WOULD RESULT IN AN INADEQUATE REPORT. LET YOUR CRITICS BE REMINDED THAT THE POST STUDY WORK AND RESEARCH ON AN INCOMPLETE OR INADEQUATE REPORT FROM YOU WOULD BE MUCH MORE COSTLY AND WOULD ONLY BREED FURTHER MISTRUST.

IT IS FOLLY TO BELIEVE THAT YOUR FINAL REPORT WILL APPEAR FAVOURABLE TO ALL. YOU CANNOT BE ALL THINGS TO ALL MEN. BUT YOUR REPORT MUST BE ABLE TO STAND CRITICISM. ONLY BY EXAMINING ALL SIDES OF THE ISSUES CONFRONTING YOU WILL SUCH BE ACCOMPLISHED. IF WE HAVE A FIXED VIEW OF WHAT WE WANT TO SEE IN YOUR FINDINGS IT WILL NOT TAKE THAT LONG TO PREPARE A REPORT WHICH REFLECTS THAT VIEW. CRITICS SHOULD BE REMINDED, HOWEVER, THAT IF THAT VIEW IS TO BE PLACED UNDER SCRUTINY THAN THERE MUST BE RESEARCH AND STATISTICAL SUPPORT FOR THAT VIEW. IN MANY AREAS WITHIN THE STUDY AREA THERE ARE OPTIONS WHICH HAVE TO BE WEIGHED. WHATEVER OPTION IS CHOSEN BY YOU, MR. COMMISSIONER, MUST BE ABLE TO STAND ON ITS MERITS BEFORE PROPONENTS OF DIFFERING OPTIONS. I KNOW

THAT YOU ARE AWARE OF THAT. I KNOW YOUR STAFF IS AWARE OF THAT. I WOULD ADDRESS YOUR CRITICS. I HOPE THAT THEY SEE THE NECESSITY FOR THAT. WHEN YOU SUPPORT ONE GROUP IN YOUR CHOICE OF OPTIONS, THAT GROUP MUST BE ABLE TO BE CONFIDENT THAT YOUR SELECTION WAS REACHED WITH FULL KNOWLEDGE OF ALL THE FACTS SO THAT THE OPTION WHICH YOU AND THEY ENDORSE WILL BE ABLE TO HAVE THE UNQUALIFIED SUPPORT OF WHATEVER ELEMENTS WITHIN THE PUBLIC AND PRIVATE SECTOR MUST BE CALLED UPON TO BRING ABOUT IMPLEMENTATION. SIMILARLY THOSE WHO OPPOSE YOUR CHOICE HAVE THE RIGHT TO KNOW THAT YOUR SELECTION WAS BASED ON AN AWARENESS OF ALL OF THE FACT AND THE IMPLICATIONS OF YOUR DECISION. TO GIVE EITHER GROUP ANYTHING LESS THAN THAT IS UNFAIR - UNFAIR TO THEM; UNFAIR TO YOURSELF.

SOME MAY FEEL THAT IT WAS UNNECESSARY FOR ME TO APPEAR HERE TODAY. IT IS TRUE THAT MY PRESENTATION ADDS LITTLE IF ANYTHING TO YOUR STUDY. I HAVE ASKED TO APPEAR ONLY IN ORDER THAT SOMEONE SET THE RECORD STRAIGHT. THE CONSTANT CRITICISM OF THIS COMMISSION IS WEARISOME. IT IS EASY TO SIT BACK AND CRITICIZE. I WANT YOU AND YOUR STAFF TO KNOW THAT THERE IS AN ELEMENT OUT THERE THAT DOES NOT ASSOCIATE ITSELF WITH THAT CRITICISM. SOME OF US WANT YOU TO KNOW THAT WE APPRECIATE THE TIME AND EFFORT THAT HAS BEEN EXPENDED.

MY LAST WORD IS TO YOUR CRITICS. A MAN SAID HE WAS AFRAID HE WAS GOING TO BE OF NO USE IN THE WORLD BECAUSE HE HAD ONLY ONE TALENT. "OH, THAT NEED NOT DISCOURAGE YOU", SAID HIS PASTOR. "WHAT IS YOUR TALENT?"

"THE TALENT OF CRITICISM."



"WELL, I ADVISE YOU," SAID HIS PASTOR, "TO DO WITH IT  
WHAT THE MAN OF ONE TALENT IN THE PARABLE DID WITH HIS.  
CRITICISM MAY BE USEFUL WHEN MIXED WITH OTHER TALENTS, BUT  
THOSE WHOSE ONLY ACTIVITY IS TO CRITICIZE THE WORKERS MIGHT  
AS WELL BE FURIED, TALENT AND ALL."

Michael Dunnill  
Ste. 701 - 1265 Arthur St. East  
Thunder Bay, Ontario  
P7E 6E7



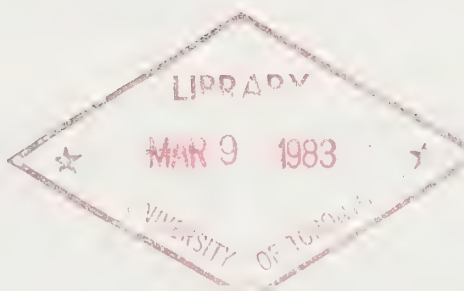
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# **A REVIEW of the ENVIRONMENTAL ASSESSMENT RESOURCE ALLOCATION and ASSOCIATED DECISION-MAKING PROCESSES in NORTHERN ONTARIO**



Prepared for  
Royal Commission on the Northern Environment  
  
by Ontario Chapter  
Canadian Society of Environmental Biologists  
  
January 1983



Canadian  
Society  
of  
Environmental  
Biologists

Société  
Canadienne  
des  
Biologistes de  
l'Environnement

February 15, 1983

Mr. J.E.J. Fahlgren  
Commissioner  
Royal Commission on the Northern Environment  
55 Bloor Street West  
Suite 801  
Toronto, Ontario  
M4W 1A7

Dear Mr. Fahlgren:

Re: Ontario Chapter of The Canadian Society of Environmental Biologists  
- Written Submission

We are pleased to submit our report entitled "A Review of the Environmental Assessment, Resource Allocation and Associated Decision Making Process in Northern Ontario." In undertaking this review, we have kept in the forefront the issues of your inquiry which were outlined in your letter of July 5, 1982.

1. How could the decision-making processes be improved for the allocation, use and management of natural resources, for land use planning, and for environmental assessment and protection?
2. What approaches towards development in the major resource based industries could increase benefits and reduce negative environmental impacts in Ontario north of 50°?
3. What alternative approaches towards natural resource allocation, use and management could help to strengthen the economic and social base of communities in Ontario north of 50°?


We are hopeful that the approaches presented herein might be of some assistance to you in the preparation of your recommendations. Please be advised that Mr. Edward Hanna, of J.E. Hanna Associates Inc., and principal author of the enclosed report looks forward to presenting a summary statement of conclusions and recommendations on February 22, next in Thunder Bay.

May I say that members of the Ontario Chapter, Canadian Society of Environmental Biologists very much appreciate the financial assistance and opportunity provided by your office to submit a brief on a very complex series of issues. Do not hesitate to contact Mr. Hanna (416-839-7163) or me



(416-675-6353) should you have questions or comments on the enclosed document.

Yours truly,

A handwritten signature in dark ink, appearing to read "Michael Michalski". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Michael Michalski  
Chairman  
Ontario Chapter  
Canadian Society of  
Environmental Biologists

MM:bb  
Enclosure .

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## 1.0

**EXECUTIVE OVERVIEW**

This section highlights the principle conclusions and recommendations of the submission. We have cited the appropriate sections of the document to facilitate reference for further details on specific points. This summary should not be considered independently of other sections, but is provided to set out for the reader, the major points of discussion and our perspectives on them. Through this initial overview of the concepts proposed, we hope that critical appraisal of the remaining sections will be improved.

1.1 Purpose and Scope

The purposes of this submission are:

- a) to review current decision-making processes in the North with respect primarily to resource allocation and environmental assessment;
- b) to outline alternative approaches to current processes;
- c) to demonstrate how these alternatives could be practically applied for a specific case study; and
- d) to comment on the implications of implementing suggested alternative approaches on current administrative procedures, government policies, private industry, and the people of the North and Ontario as a whole.

The scope of the submission is Northern Ontario, generally north of the 50th parallel latitude, although many of our findings have application to other parts of the province and the nation. Our expertise is environmental biology and resource allocation and management; therefore, we have focussed our comments on the natural environment. Our recommendations, however, have profound social, economic, and political consequences which we have considered.

## 1.2 Approach

The conclusions and recommendations are based on: i) a critical evaluation of technical reports including several for which the major authors are members of the Society, ii) recent Society-sponsored public forums on resource allocation and environmental assessment, and iii) the experience and opinions of those members directly responsible for the preparation of this submission. To demonstrate the practical feasibility of the proposed approach, a case study, the Onakawana Development proposal, was selected and analysed.

## 1.3 Current Decision-making Processes in the North

The roles of the Ontario Ministries of Natural Resources and the Environment are examined with respect to legislative authority, current practices and overlap in jurisdiction (Section 4.1 and 4.2). In particular, variations in the public review and formal appeal processes are discussed in association with public confidence and acceptance of government resource policy. Additionally, the issue of implementing and enforcing resource allocations is considered at both the regional and site-specific scale.

The major conclusions of this analysis are that:

- a) Resource allocation strategies for the North should have a formal and legally-binding public review and appeal process
- b) Resource allocation plans should be approved under the Environmental Assessment Act or new legislation.
- c) The Ontario Ministry of Natural Resources should maintain primary responsibility for formulating and implementing resource allocation plans
- d) Current legislation, such as the Public Lands Act, is not designed for the regulation of comprehensive resource allocations and should either be modified or new legislation introduced.

The Environmental Assessment Act as it pertains to the North, is examined in detail in relation to experience across Canada with the environmental assessment process. The primary conclusions of this analysis are:

- a) The effectiveness of the Act in terms of achieving its stated objectives, could be significantly improved both immediately and over the long-term.

- b) Major weaknesses identified are the lack of i) focus on key decision-making attributes, ii) emphasis on quantitative predictions of impacts, iii) methods to evaluate social significance of biophysical impacts, and iv) meaningful monitoring in terms of measuring actual impacts resulting from development and the effectiveness of mitigative measures.

#### 1.4 New Concepts

A review of current proposals to improve resource allocation and environmental assessment is presented (Section 5). Two complementary concepts, termed the ecological and ecosystem approaches, are considered at the regional resource allocation and individual development scales. Our major conclusion is that:

Components of both approaches offer potential for practical application in Northern Ontario.

#### 1.5 Recommended Approach

An integrated hierarchical approach to resource allocation and environmental assessment is presented (Section 6). A discussion of modifications to regional resource allocation planning is followed by a modified approval process for site-specific proposals. Class environmental assessments and operation environmental management are briefly considered in relation to the overall approach.

The major components of the approach to regional resource allocation (Section 6.1) are:

- a) Statement of Objectives
- b) Public Input
- c) Decision-making Rules
- d) Identification of Resource Potential
- e) Quantification of Demand
- f) Allocation Specification
- g) Allocation Strategy Approval
- h) Monitoring and Management

The approach to the approval of site-specific developments (Section 6.2) considers:

- a) Guidelines
- b) Peer Review Committee
- c) Public Input
- d) Selection of Important Attributes
- e) Acceptable Level of Precision
- f) Boundary Definition
- g) Predictive Framework
- h) Study Strategy
- i) Monitoring
- j) Social Value Quantification
- k) Decision-making Reports

Specific recommendations are made for implementing each component.

## 1.6 Case Study

An overview of the original Onakawana Development Limited - Ontario Hydro joint proposal is provided (Section 7.1); followed by a critical comparison between the environmental assessment process documented and our proposed approach (Section 7.2). Our major conclusion is that:

The Onakawana environmental assessment exhibits the generic weaknesses that we identified for the process in general.

## 1.7 Feasible Improvements

With respect to the Onakawana project, we point out feasible modifications to the process which would have: i) reduced the effort required in collecting data for many environmental parameters; ii) led to conclusions more directly applicable to the overall decision-making process; and iii) provided a basis for improving our understanding over the long-term of environmental impacts.

The major improvements recommended relate to i) selection of important attributes, ii) the overall study strategy; iii) social value quantification, and iv) regional context.



## 1.8 Implementation of Proposed Approach

Based on the results of the case study and our review of the overall resource allocation and environmental assessment processes, we discuss modifications to the current decision-making process and technical approach to resource allocation and environmental assessment that will be required for implementation (Section 9). Consideration is given to the responsibilities of proponents, the Ontario Ministry of the Environment, the Ontario Ministry of Natural Resources, and the Ontario Government as a whole.

For proponents, we recommend that:

- a) They accept and encourage government to adopt the proposed methodology.
- b) They continue to assume the normal costs associated with environmental assessments, including additional costs associated with peer review committees; however, the costs for detailed monitoring for select experimental case studies be the responsibility of government.

For the Ontario Ministry of the Environment, we recommend that:

- a) It adopt the proposed approach. In particular, the Ministry needs to take a more active role in the early stages of the process in selecting key decision-making attributes and appropriate methodologies.
- b) It undertake in cooperation with other government agencies, in particular the Ontario Ministry of Natural Resources, a selection of case study sites and initiate detailed long-term monitoring programs to quantify the relationships between development impacts and key environmental attributes.
- c) It fund the development and testing of methodologies to quantify the social value of biophysical attributes under varying social and environmental settings.

- d) It prepare in collaboration with other government agencies and proponents and distribute a manual of standard environmental protection practices applicable to recurrent site management issues.

For the Ontario Ministry of Natural Resources, we recommend that:

- a) It clearly set out a quantitative basis for deriving the demand and supply of natural resources in land use plans, including the specification of inputs, interrelationships between resource categories, assumptions and uncertainties, and the potential costs and effects on demand and supply of alternate resource management tactics.

For the Ontario Government as a whole we recommend that:

- a) It prepare and enact modifications to existing or new legislation for the preparation and implementation of comprehensive regional resource planning in the North.
- b) The legislation should provide a formal public appeal process and should make the approved plans binding on industry, government, and the general public.
- c) The land use plans for Northern Ontario currently under review should be approved under the Environmental Assessment Act or new legislation.
- d) The Ontario Ministry of Natural Resources should retain responsibility for comprehensive regional resource planning.

## 2.0 INTRODUCTION

### 2.1 Background Statement on the Canadian Society of Environmental Biologists

The Canadian Society of Environmental Biologists is a nationally-based organisation with members resident in all provinces and territories. Eight regions exist, and members of each region may organise into regional chapters.

Two directors are elected by the members of each chapter to a National Board of Directors. The Board of Directors in turn appoints a national executive, consisting of president, vice president, secretary-treasurer, and newsletter editor.

Each chapter may form an executive and is empowered to adopt such rules and regulations as may facilitate the operations of the chapter; however, each chapter, in conducting its affairs at a regional level, must do so in a manner which is consistent with the society's constitution. Members of society must hold a recognized degree in the biological sciences and be practising biologists.

The purposes of the Society as set out in its constitution are:

- 1) The Society shall seek to maintain high professional standards in education, research, and management related to resources and the environment.
- 2) The Society shall promote and develop policies that shall achieve a balance among resource management and utilization, and protection of the environment and quality of life.
- 3) The Society shall undertake to provide professional appraisal and constructive advice on matters pertaining to the use of resources and to management of the environment.

- 4) The Society shall undertake to assess and evaluate administrative and legislative policies and programs which may have significant ecological ramifications in terms of conservation of resources or quality of the environment.
- 5) The Society shall endeavour to protect the public interest in matters relating to conservation of natural resources and to management of the environment.
- 6) The Society shall encourage involvement of its members with public groups and participation of its members as resource professionals in citizen activities.
- 7) The Society shall seek to advance education of the public on matters pertaining to the use of natural resources and to the protection and management of the environment.
- 8) The Society shall endeavour to undertake environmental research and education programs and projects of benefit to the community.
- 9) In pursuit of the foregoing objectives, the Board of Directors may from time to time affiliate the Society with, or enter into reciprocal arrangements with other societies, corporations, or associations having similar or related interests and purposes.

The Society has a membership of over 450 biologists with representation from industry, private practice, provincial and federal governments, universities, and public interest groups. Regional chapters are active across Canada, the Ontario Chapter being one of the most dynamic. In Ontario, meetings are convened monthly except for June, July and August, with topics ranging from technical exchange on biological matters to policy analysis of resource management and environmental assessment decisions. The meetings are open to the general public. Over the last year representatives from Treaty #3, the Ontario Union of Indians, Ontario Ministry of Natural Resources, private consultants, lawyers, land use planners, economists and others have addressed the organisation on matters relating directly to decision-making in the field of resource management.



Both the National body and the Ontario Chapter organise annual meetings. This year the National meeting focused on ecological and ecosystem approaches to environmental assessment and with a registered attendance in the order of 100 people. In 1982, at the Ontario Chapter annual meeting, a number of presentations were made related to the biologist's role in the environmental assessment process and over 100 people registered to hear the speakers.

A major undertaking of the Chapter recently has been to canvass all practising biologists in the Province to gain a better awareness of overall concerns and attitudes. The results of the questionnaire are currently being tabulated. In the past, biologists on behalf of the Society have made personal representations to federal and provincial governments, appointed commissions and tribunals. Written submissions and testimony have been presented to organisations such as the Niagara Escarpment Commission, National Parks Hearing Board, Ontario Municipal Board, and the Ontario Waste Management Corporation.

## 2.2 Purpose and Scope

The Commission has stated that it will "focus on...the development and decision-making process as it relates to the Environmental Assessment Act and resource allocation and management."

In the Order in Council instating the Commission (Lewis, 1977), the list of activities which should be considered included harvesting, supply and use of timber resources, mining, milling, smelting, oil and gas extraction, hydro-electric development, nuclear power development, water use, tourism and recreation, transportation, communications or pipelines.

A specific charge of the Commission is to inquire into methods that should be used in the future to assess, evaluate and make decisions concerning the effects on the environment of such major enterprises.

The purposes of this submission are:

- a) to review current decision-making processes in the North with respect primarily to resource allocation and environmental assessment;
- b) to outline alternative approaches to current procedures;
- c) to demonstrate how these alternatives could be practically applied for a specific case study; and
- d) to comment on the implications of implementing suggested alternative approaches on current administrative procedures, government policies, private industry, and the people of the North and Ontario as a whole.

The scope of the Commission as set out in the Order in Council is "north or generally north of the 50th parallel of north latitude" and the scope of this submission complies with these boundaries. Many of the issues discussed, however, are not unique to the North although they are of greater relevance and significance in that setting due to the importance of the resource base to the well-being of Northerners.

We have limited the scope of our submission to matters relating to resource allocation and management, and the natural environment as these are the primary areas of expertise represented by the Society membership. Many of the issues raised have profound economic and social consequences of which we are cognisant; the consideration of how best to reconcile these elements is in our view one of the major challenges of the Commission and will require open dialogue between technical experts, administrators, and various segments of the public with vested interests. Immediate solutions to some issues may be feasible; however, others will require a long-term commitment by the parties involved through on-going improvements in planning and decision-making procedures. Much will undoubtedly be learned only through trial and success or error as the case may be. Our submission has considered both the short and long-term aspects of planning and decision-making and we feel that our recommendations if implemented will facilitate improvements in resource management and in the future of the people of the North.

### 2.3 Acknowledgements

Several Commission staff members were helpful in providing background information for this submission, in particular, the efforts of Ms. Faye Clement are noted. Mr. Robert Malvern and Mr. Robert Ruggles of the Environmental Studies and Assessment Department, Ontario Hydro assisted in making available reports on the Onakawana Development proposal and gave freely of their time to discuss the background and details of the proposal. Mr. Ruggles also reviewed the first draft of the submission to ensure that the technical details relating to the Onakawana proposal were accurately documented. Dr. Gordon Beanlands and Mr. Peter Duinker through their reports on developing an ecological approach to environmental assessment and discussions on the philosophy and application of their principles have had a significant influence on our thinking. Dr. Jack Vallentyne has made available a number of reports pertaining to the "Ecosystem Approach" and has willingly discussed means to implement this philosophy in the context of specific proposals.

The following members of the Ontario Chapter, Canadian Society of Environmental Biologists critically reviewed and made constructive suggestions as to modifications and improvements.

Mr. Michael Michalski, Chairman  
Mr. Allan Wainio, Secretary/Treasurer  
Mr. Robert Hester  
Mr. John Maher

The submission was written by Mr. Edward Hanna, J.E. Hanna Associates Inc., on behalf of the Ontario Chapter through financial assistance provided by the Royal Commission on the Northern Environment.

## 3.0

## METHODOLOGY

3.1 Study Approach

## 3.1.1 Related Activities of the Society

In January, 1982 at the National Annual Meeting of the Canadian Society of Environmental Biologists (CSEB) Dr. Gordon Beanlands presented a progress report on a contract that he was undertaking regarding a critical review of environmental assessments (EA) in Canada. Many members of the Society had participated in the regional workshops which Dr. Beanlands' study team convened as part of the project, but this was, for most, their first exposure to the general conclusions which were beginning to be formed.

As a result of that meeting, the National Executive appointed a EA Review Committee to monitor the progress of Dr. Beanlands work and to provide critical appraisals of related reports and recommendations on behalf of the CSEB. The Committee members and their affiliation are listed below.

Mr. Edward Hanna (Chairman)	J.E. Hanna Associates Inc. Toronto, Ontario
Dr. T.C. Meredith	Department of Geography McGill University Montreal, P.Q.
Mr. David Morantz	Department of Fisheries and Oceans
Mr. Ken Reid	Potash Corporation of Saskatchewan Saskatoon, Saskatchewan
Mr. Alan Kennedy	Esso Resources Canada Ltd. Calgary, Alberta
Dr. Jack Vallentyne (ex officio)	Department of Fisheries and Oceans Burlington, Ontario

The Committee prepared a formal review (Hanna, 1982) of the draft final report (Beanlands and Duinker, 1982(b)). Many of the comments and recommendations made in the Committee's report have been precised in this submission.



Several biologists presented at The Ontario Chapter Annual Meeting in 1982, examples of practical experiences, constraints with the current system, and suggestions for future improvements in environmental assessment and management in Ontario. These topics have also received discussion at a number of monthly Chapter meetings.

The central topic of the 1983 National Annual Meeting of the CSEB was environmental assessment in Canada. Dr. Beanlands and Mr. Duinker were present to report their findings and several members of the EA Review Committee served as panelists in an open discussion of the concepts and recommendations. Over 100 biologists attended and participated in the active discussion period.

In the afternoon session, Dr. Vallentyne made a presentation of the concepts fundamental to the "Ecosystem Approach". Considerable discussion ensued regarding the relationship between the two concepts which had been presented and how they might practically be implemented. Many of the opinions expressed at that meeting influenced the content of this submission.

Subsequent to the 1983 Annual Meeting, the National Executive has requested the EA Review Committee to examine practical means to implement the basic concept of a modified environmental assessment process in Canada. This work is currently underway.

Dr. Jack Vallentyne has served as the President of the Society for the last two years. During his term, he toured to all CSEB Chapters; presented the concept of the "Ecosystem Approach"; and received feedback from members of the organization. He has also presented and received comments on the concept from a much broader segment of Canadian society and through these communication he has been able to refine the approach.

The preceding account reflects the initial foundation from which this submission was prepared. While many of these tasks were not undertaken with the expressed goal of preparing a submission to the Royal Commission on the Northern Environment, they have had a significant influence on the contents of the report. Furthermore, it can be validly stated that many of the opinions contained in the submission reflect those expressed through these technical exchanges and that this represents a large segment of the scientific expertise in environmental biology in Canada. These opinions have evolved over a number of years and have resulted from practical experiences with the EA process.

### 3.1.2 Specific Tasks

The first task in preparing the submission was to select an appropriate case study. Through discussions with staff of the Commission, three candidates were considered, namely:

Detour Lake Road  
Onakawana Development  
West Patricia Land Use Plan

The Detour Lake Road was rejected since the EA process in that example was truncated with the issuing of an exemption order by the Provincial Government under the Environmental Assessment Act. In the case of the West Patricia Land Use Plan (WPLUP), it offered excellent potential to demonstrate the role of comprehensive regional plans in the EA process, as we advocate later in this submission, but provided no opportunity to deal with the more conventional site-specific EA approval process. In addition, we were not aware of any EA report or comparable type of document that analysed the potential implications of WPLUP.

The status of the Onakawana proposal is currently in flux. The sensitivity of preparing a review of the process was, therefore, reduced somewhat and difficulties obtaining information lessened. Additionally, a draft EA report had been prepared although not formally released. As a result, many of the issues which we address in our submission could be related to the Onakawana example. These circumstances presented certain limitations also, as it would have been most preferable to have a project which had been through the entire approval process and had been constructed; no examples of this description, however, were available. A more detailed discussion of the Onakawana proposal as a case study is presented in Section 7.

Once the case study selection was finalized, the Commission provided access to all relevant documentation which they had on file and provided the names of people to contact regarding the various aspects of the study. The on-hand documentation was examined in detail prior to contacting representatives of the proponent or the Ontario Ministry of the Environment (MOE).

Mr. Robert Burdette was the individual responsible in the Environmental Approvals Branch of MOE for the review of the Onakawana proposal; however, he has left their employ. Accordingly, we were not able to contact him. The project, now being in a state of reevaluation, has not demanded significant attention by Environmental Approvals Branch staff

and we decided not to pursue further discussion with this agency covering the case study.

Ontario Hydro was approached for access to background reports and an account of the EA process from their perspective. We met with Mr. Robert Ruggles who had been the project manager responsible for preparing the draft EA and Mr. Robert Malvern who is the Supervisor of the Environmental Studies and Assessment Department, Ontario Hydro. As a result of these discussions, it was decided that Ontario Hydro with the agreement of Onakawana Development Limited (ODL), Hydro's corporate partner in the undertaking and the group responsible for the mining operations, would make available the technical background reports to the EA and would coordinate any further information requirements. As a result of these arrangements, it was not necessary to contact ODL or consultants retained for the project.

Discussions with Dr. Vallentyne, Dr. Beanlands and Mr. Duinker were held concerning the broad aspects of their proposals and specific components. In addition, the author attended all of the CSEB functions described in Section 3.1.1 and was the Chairman of the EA Review Committee.

The submission was then written based on file and published reports made available to us. A draft copy was circulated to an internal review committee of the Ontario Chapter consisting of the following people.

Mr. Michael Michalski  
Mr. Allan Wainio  
Mr. John Maher  
Mr. Robert Hester

All of the internal reviewers: i) attended one of more of the meetings described; ii) have been members of the Society for a number of years; and iii) through their professional experience have been involved in a large number and diverse range of environmental impact studies.

The comments of the reviewers were incorporated in the final version of the submission.

### 3.2 Submission Organization

The following sections of this submission cover four major topics. Section 4 examines current practices and responsibilities of government agencies in resource allocation and EA in the North. The existing EA process is critically reviewed from the context of decision-making, and of improving our knowledge of environmental impacts overall.

Sections 5 and 6 deal with new concepts and a proposed approach to resource allocation and EA. The major components of each are described relative to their practical application and each other.

Sections 7 and 8 focus on the case study, the Onakawana Development Proposal. The first section provides an overview of the proposal, and the environmental studies and related EA process; followed by a comparison between the documented approach and that which we are recommending. In Section 8, we look at the feasibility of having had adopted the modified approach in the case study example.

The last sections examine both short and long-term changes that would be required for our proposed approach to be implemented generally throughout the North. The responsibilities of both industry and government for implementation are discussed in light of the current EA process. Finally, we consider our proposal in relation to ongoing comprehensive resource planning being undertaken by the Ontario Ministry of Natural Resources (MNR). Section 9 concludes the submission with a list of recommendations to the Commission resulting from our analysis and discussion.



## 4.0 CURRENT DECISION-MAKING PRACTICES IN THE NORTH

This section examines current decision-making practices as they relate to resource allocation and development. The discussion deals primarily with two provincial ministries, namely MNR and MOE. MNR is responsible for the majority of the decisions regarding allocation and management in the North for both renewable and non-renewable resources. MOE has responsibility to administer the Environmental Assessment Act, the implementation of which may have profound implications for resource allocation. In addition, through various acts relating to environmental pollution, MOE can influence significantly industrial and domestic developments.

We recognise that other ministries (eg. Transportation and Communication, Northern Affairs, Energy, Culture and Recreation, Industry and Tourism, and Municipal Affairs and Housing) may also play a significant role in some resource allocation issues. Due to practical constraints, we have limited this discussion to the two key ministries from a natural resource point of view, but, we do believe that the Commission should take the activities of these other agencies into account in your recommendations.

### 4.1 Ontario Ministry of Natural Resources

#### 4.1.1 Legislative Mandate

MNR is responsible for mining, timber, fish and wildlife, outdoor recreation, and Crown land management and disposition in Ontario. It carries out these duties under a variety of acts ranging from the Public Lands Act to the Pits and Quarries Act to the Game and Fish Act. Compared to MOE, MNR administers much older legislation in terms of when it was enacted. Accordingly, provisions for public input are more restricted. In addition, MNR has many procedures and policies that have evolved over its long history and are based on tradition and experience. This background significantly influences approaches to resource management and decision-making.

#### 4.1.2 Decision-making

In some cases, such as the Pits and Quarries Act, a public appeal process is available for opponents to a proposal; whereas in others, such as the Public Lands Act, an appeal process is absent.

A major difficulty that has been cited before with decision-making by MNR (eg. Anon., 1979), relates to internal conflicts of purpose between some Ministry programs, for example, the extractive industries such as timber and mining versus outdoor recreation including hunting, fishing, and parks. These conflicts are often exacerbated by many decisions being left to the sole discretion of the Minister without legal requirements for public notice and input. While the Ministry has, in most instances, attempted to involve concerned citizens, some public groups feel uneasy as long as formally-binding regulations to implement MNR policies are lacking.

Currently, the Ministry is in the final stages of preparing its Strategic Land Use Plans (SLUP) at the district level. Extensive public consultation has gone into these plans but no legal recourse is provided to the public to contest the plans or to request modifications. Allocation policies and implementation strategies may be changed internally by the Ministry without a formal amendment procedure including public input.

In summary, for a limited number of acts administered by MNR, a formal and binding public review process is in place. However, its land use planning exercise is not bound by explicit regulations in terms of public input and appeal as is also the case for other management plans and decisions such as for forestry, fish and wildlife, and Crown land dispositions. In these instances, decisions are made autonomously by MNR, although public consultation is normally conducted.

## 4.2 Ontario Ministry of the Environment

### 4.2.1 Legislative Mandate

MOE was responsible, up to 1975, primarily for maintaining the environmental quality of air and water resources. Its mandate pertained principally to the physical environment; although, biological and human health considerations were, and still are, paramount in establishing quality standards. Through the Environmental Assessment Act, MOE's mandate was expanded significantly to include evaluation of the environmental implications of major development proposals. The interpretation of "environment" in the Act, implies that effects ranging from physical and biological to social and economic should be considered. Considerable potential overlap between the jurisdiction of MOE and MNR exists as a result, and negotiations between the Ministries to clarify responsibilities have been ongoing for several years.

This duplication may have profound consequences to resource development in the North. For example, it is feasible that MNR through their SLUP program might designate a particular area for resource development; yet, MOE through the Environmental Assessment Act could deem the development inappropriate. This conflict has led to suggestions that the Environmental Assessment Act should be applied to MNR land use plans. From the perspective of expediency and orderly decision-making with respect to resource development in Northern Ontario, resolution of these jurisdictional boundaries between MNR and MOE is essential.

### 4.2.2 Decision-making

Formal public hearings are part of several acts administered by MOE, for example, the Environmental Protection, and Environmental Assessment Acts. In other situations, particularly those dealing with environmental standards, regulations are imposed without public appeal; however, in most instances, they are legally binding to both private industry and government alike.

A difficulty faced by MOE, is their restricted jurisdiction in the fields of resource allocation and management. They are required to maintain an environment of suitable quality to sustain renewable resources; yet, lack a direct connection with the renewable resource base and management of resource users. Recognizing this fact, MOE and MNR often work jointly to reach common ends; but, difficulties can arise when the activities of MNR comes under formal



review by MOE.

In the past, MOE has viewed environmental standards or objectives as a primary basis for decision-making. If a maximum level of pollutant concentration was not exceeded, no environmental impact is considered to have occurred. However for only a very few cases, can a rigid impact threshold be defined for a given resource; instead, one finds that sublethal effects may occur at lower concentrations. Standards are generally set at levels above which widespread and/or easily-detectable effects will occur. From the perspective of ease of decision-making and enforcement, the standards approach has merit, although, decisions based strictly on the assumption that there is no impact below a given threshold may be poorly founded. The ideal situation would be to assess the implications of each new potential change to environmental quality by analyzing the total effects in an additive and quantitative valuation system.

#### 4.3 A Critical Review of the Current Environmental Assessment Process

The application of the Environmental Assessment Act is now examined in the legislative and decision-making context described in the preceding sections.

The potential jurisdictional and policy conflicts between MOE and MNR are greatest in the North where virtually all land is owned by the Crown and therefore managed by MNR. The land use planning program of MNR could reduce this potential over the long term, although, the net effect will depend to a large extent on the formal review process, if any, of the plans. We are of the opinion that if the plans are approved under the Environmental Assessment Act or some combination of acts under the Consolidated Hearings Act, a significant advance in resolving inter-ministerial conflicts could be realized.

In the past, the EA process has been directed at specific undertakings. Recent applications by Ontario Hydro for approval of their electricity supply strategies for various sectors of the Province (eg. Southwestern, Eastern, etc.) were the first cases where EA had been applied on such a broad regional context. Experience with these reviews, demonstrated the feasibility of applying the EA process to less site-specific undertakings.



The EA process in theory begins with the concept of an undertaking and ends with the construction and monitoring of impacts associated with the development. A series of steps are common to most EA and we have structured this critical review around the essential elements of the process.

The following comments pertain primarily to the application of EA to site-specific proposals. Later in Section 9, its application to regional proposals is discussed but a meaningful critical review of current practices is not possible due to limited related experience in Canada.

This review is based on our experiences with the EA process in Ontario and those reported for Canada by Beanlands and Duinker (1982(b)). In the latter case, over 20 specific examples of EA reports and approval processes were reviewed. In addition, they convened seminars across Canada to gain an appreciation of the state-of-the-art from those directly involved in EA. Where appropriate, we have used their observations as a framework within which to express our opinions on the weaknesses and strengths of current EA processes.

#### 4.3.1 Guidelines

"Assessment guidelines are largely responsible for the sectorial, inventory-style approach so often taken to describing the environment. Guidelines have commonly consisted of an all-inclusive 'table of contents' for an environmental impact statement" (Beanlands and Duinker, 1982(b)). Preparation of guidelines is normally one of the first formal steps in the EA procedure and hence one of the most critical. The concern of approval agencies to cover off every conceivable concern in the guidelines stems from several factors: i) they do not want to be held ultimately responsible for a key issue being overlooked; ii) their unfamiliarity with the nature of the development proposal and/or the site proposed; and iii) the legislative basis for the process is all encompassing and makes little provision for focussing on key issues.

While it is essential that a broad range of possible impacts is retained within the purview of the legislation, consideration needs to be given to setting out basic objectives that the approval agencies want to achieve and means whereby the key issues can be identified and addressed. The provision of an extensive catalogue of the natural environment for a specific proposal has little value in the EA process.

#### 4.3.2 Boundaries

In most instances, spatial boundaries for a given proposal relate to ownership or the area to be disturbed and its immediate environs. From an ecological point of view, this is arbitrary since the impacts of the proposal may extend far beyond the site. For example, a pulp mill releasing effluent to a stream will have effects down river, the distance being partly a function of the volume and concentration of the effluent, the volume and rate of flow of the watercourse, the type and abundance of the aquatic species present, etc. This boundary issue is well recognized in air pollution concerns but is applicable also to aquatic and terrestrial issues.

The issue of temporal boundaries is rarely considered. For example, the change in the thermal characteristics of a river may be altered by heated effluent discharge but the time required for a new aquatic community to become established and equilibrate is rarely considered. A time dimension is often essential in appraising costs and benefits, particularly if some type of present value is being calculated. An explicit statement of the rationale for selecting both spatial and temporal boundaries is required to permit effective review and evaluation of EA documents.

#### 4.3.3 Selection of Important Attitudes

In the early stages of the EA process, environmental attributes of principal concern and warranting detailed evaluation should be identified. As discussed in Section 4.4.1, an "umbrella" approach is typical with limited attention being given to all attributes, important or not. In theory, this screening procedure has merit; however, as we discuss in Sections 6 and 9, several serious constraints to its implementation must be resolved, in particular, a means to reach a common consensus between parties.

#### 4.3.4 Significance

Significance is usually described in subjective and qualitative terms which are based on the interpretation of a report's author(s) with no opportunity for quantitatively modifying these conclusions. The following examples are quoted by Beanlands and Duinker (1982(b)) from EA reports that they reviewed, and demonstrate the variation in interpretation and the subjective element involved in assigning significance.

"Major impacts - impacts of great visual or ecological consequence and which may be regional or long-term in nature. Such impacts may be difficult to prevent or mitigate."

"Significant impacts are those that require further consideration or action."

"Significant impacts - impacts that require further action in the form of additional evaluation or implementation of environmental protection measures."

The issue of significance is central to the entire EA process. It is not the role of the scientist nor the proponent to decide what is significant; their role is to provide quantitative predictions of the physical effects which could result from a given proposal. Society through the political process and direct public input must deem which effects are significant recognizing the costs and consequences, both immediate and long-term, of including or rejecting certain attributes. The scope and detail of environmental concerns examined must be traded off against time and budget implications for proponents. Additionally, as more environmental attributes are given increasing importance, improvements in long-term environmental quality may be achieved, but at the expense of potentially shorter-term benefits which could be realized from resource development. No simple basis for making these essential decisions exists; however, consistency among decisions in terms of rationale should be an overall goal.

An effective process to evaluate quantitatively social significance is still lacking in the EA process and in our opinion, warrants immediate investigation and resolution.

A point of confusion which is frequent among both scientists and non-technical people is the relevance of statistical significance to the issue of social significance. In our opinion, there is no relevance; tests for statistical significance are convenient and widely-recognized procedures among scientists for evaluating the likelihood of being wrong but contain no inherent basis for deriving significance from the perspective of Society. The role of statistics is discussed in Section 6.2.5, and elsewhere in the report.



#### 4.3.5 Baseline Studies

A major justification for many of the extensive data collection exercises associated with EA's, is the need to describe the baseline or pre-development characteristics of the natural environment. While this intention has merit in theory, the feasibility of achieving this goal is rarely questioned.

Take a simple example; annual runoff and river flows are known to vary from year to year and the likelihood of a range of given flows can only be quantitatively derived if flow records for a sufficiently long period are available. In the case of relatively simple (compared to ecological interactions) hydrological systems, 10 to 20 years of records are considered minimum. Although flows may be imputed on the basis of observations from nearby rivers or climatological data, the reliability of the estimated flows is reduced. For ecological systems, the imputing process is much more complex and concomitantly less reliable.

The decisions faced by investigators are:

- i) "to what extent can the baseline conditions be established within the time and budget constraints of the project?";
- ii) "for which ecological parameters?"; and
- iii) "will the baseline data be sufficient to differentiate between changes induced from the construction and operation of a development and natural variation?"

Rarely are these questions asked at the beginning of EA studies for if they were much of the time and effort spent on assembling "baseline data" would be redirected to more tenable ends.

We believe that baseline studies have a value but they must be undertaken with a committed level of effort sufficient to meet scientific and management requirements. Accordingly, it will not be practical to establish the baseline for all environmental variables for all development proposals. In our opinion, conscious and concentrated efforts directed at a limited number of relationships will yield much greater returns in terms of improved decision-making, immediately and over the long-term, than the current extensive approach common in EA studies.



#### 4.3.6 Hypotheses and Experiments

The relatively new inception of the science of ecology as a practical applied profession and the limited past experiences and knowledge on which predictions can be based, demand that effective feedback is realized through the EA process. By feedback we mean that the prediction of environmental impacts must be derived in such a way that after the project is built, the validity of the predictions can be verified. In essence, this is the basis of science and the experimental approach.

More specifically, the scientific method consists of composing hypotheses on the basis of related observations and testing these postulations through controlled experiments. The application of this process to EA's is sound since the construction of major development can be seen as a giant experiment that would otherwise be impossible to conduct. If precise knowledge concerning ecological cause and effect relationships is to be obtained, this approach is essential.

A number of rather onerous demands may be placed on proponents as a result. To test hypotheses, one must make quantitative predictions, assemble reliable preconstruction baseline data, and then after construction assemble reliable data on changes. To date, few EAs have set up testable hypotheses and virtually no examples of testing through subsequent observations were identified across Canada. Judicious application of this concept is essential or the costs of EA's both in time and money will escalate dramatically; however, we cannot expect to improve our knowledge of ecological responses and the effectiveness of mitigative measures unless some commitment in this area is made.

#### 4.3.7 Predictions

In the preceding section, the need for quantitative predictions was identified. In most EA's however, impacts predictions consist of vague generalizations, often lacking any interconnection between systems or parameters, their derivation being obscure, and with no quantitative basis. Clearly these types of predictions are not testable.

The use of explicit relationships is prerequisite to generating, testing, and subsequently modifying, predictions of ecological responses. The term "model" often arises in this context and is a subject for considerable debate among scientists and others. We view a

model as an explicit statement of the assumptions, relationships, and quantitative inputs that one must implicitly use to arrive at specific conclusions. If one makes a statement concerning an expected impact, a model has been constructed mentally or on paper concerning the causal relationships between various factors. By stating these relationships explicitly, ambiguity between opinions is minimized; different assumptions can be tested; and over the long-term, our basic level of knowledge of interactive relationship improved. The difficulty that often arises with models is that they demand one to state precisely the logic behind conclusions and if this has not been carefully thought out, it can be uncomfortable to attempt to rationalise poorly-founded opinions.

Models do not require computers; they require clear unambiguous statements of a person's assumptions, values, and perceived relationships. The translation of models to computer systems understandably alienates non-technical individuals; we stress, however, that computers are merely tools to facilitate the calculation component of a model. The construction of models is strictly a human function, one requiring a high level of personal involvement and commitment, a requirement which is common to any complex decision-making process.

#### 4.3.8 During and Post-construction Monitoring

During and post-construction monitoring are the after-approval counterparts of baseline studies; to test hypotheses, one must determine if actual measured ecological responses resemble those predicted. The obstacles of natural variation and time periods are equally prevalent and significant considerations for these studies.

Another complicating factor needs to be considered. During the approval process, there is a strong incentive on the part of the proponent to conduct some type of "baseline" studies, but once the project is approved, much of the incentive is removed and interest by the public wanes. As a result, monitoring studies may be specified in approval orders, but an effective mechanism to carry through these requirements is lacking. In addition, since they are a post-construction activity and the EA process only began in earnest within the last 5 years, few occasions for monitoring to be employed and evaluated have resulted. We believe that a more formal and efficient process is required to carry out future monitoring.

The ideal situation is to establish pre-construction baseline conditions, to build the undertaking, and to verify predictions through post-construction monitoring. As mentioned, time is currently a major constraint in applying this approach, although this constraint will diminish as the extent of past experiences broadens.

In the interim, a valuable strategy often overlooked or discarded, is the potential to examine projects already constructed in environments similar to a specific undertaking. Conclusions may be drawn concerning long-term impacts if sites are fairly comparable. The validity of this approach is strengthened as the number of cases increases and consistency between observations is recorded. A wealth of knowledge is potentially available through comparative analyses. This is true particularly in the North where a diverse selection of past developments are scattered throughout. Because of the isolated nature of many projects, the potential for confounding influences from other activities is minimized creating an ideal setting for comparative analysis through site-specific monitoring.

#### 4.3.9 Mitigation

A common practice in most EA reports is to identify significant impacts, and then to propose sufficient mitigative measures that no significant impacts are predicted to occur. While this a legitimate approach to environmental design, it can be undermined by several potential weaknesses.

First, as noted in Section 4.3.4, a basis for ascribing significance is lacking and, hence, the level or type of mitigation required to go below the significant point is somewhat arbitrary.

Secondly, mitigative measures are rarely prescribed in a strict quantitative sense, but more that they will be carried out. While this approach has merit, if a specific objective or level of control is specified, without such requirements (which is normally the case), little protection is assured. Furthermore, if the performance of the specified measures in terms of reliability, and relationships between application intensity and ecological response are unknown, potential effectiveness and practicality are difficult to assess.

This weakness is best illustrated by the following example. Consider a development expected to remove a spawning area



for walleye; assume that this is deemed a significant impact. A proponent could state that it would be mitigated by constructing a new spawning bed and therefore, no significant impact will occur. This statement may or may not be valid; it will depend on the level of effort expended and its success. To take the argument to an extreme, a proponent could always build a hatchery if the spawning bed alternative failed.

The point is that given sufficient effort is expended, it is possible to mitigate virtually any impact. It follows therefore, that unqualified statements of mitigation can be used to discount most significant impacts. If adequate assurances could be provided that such mitigative measures as necessary to protect a given resource would be undertaken, then environmental approvals would consist primarily of securing adequate performance bonds from proponents. The financial costs to proponents of providing such securities make this approach practically infeasible, not to mention the response that could be expected from the general public. We conclude, therefore, that specification of unquantified mitigative measures to reduce impacts should not be accepted at the project approval stage. A preferred alternative would be for maximum levels of disturbance or degradation to be prescribed. Proponent would then be required to make some type of formal commitment: i) to meet these objectives; ii) to carry out any proposed mitigative measures; and iii) to undertake compliance monitoring to demonstrate adequate performance.

Lastly, quantitative relationships between the degree of mitigation and the reduced level of impact are scarce. Trial and error testing is required and only over the long term will sufficient understanding be gained that mitigative measures can be specified with a high degree of reliability, another statement of the need for monitoring. The issue of risk and uncertainty which is discussed in Section 6.2.5 and elsewhere in the submission, is also raised by this example.

#### 4.3.10 Decision Reports

The relationship of the EA process to decision-making is discussed in Section 6; however, several points are noted in this summary. Past experience has shown that decisions on project approval are based largely on social, economic, and political factors which are not related to environmental concerns. EA reports generally avoid the issue of comparing directly environmental costs and benefits with monetary impacts such as increased



construction costs or potential benefits foregone. A long-standing argument exists concerning the quantitative valuation of common goods and intangibles values. The fact remains that to arrive at a decision on a particular proposal at some point in the process a weighing of economic, social, political, and ecological costs and benefits must be performed or else some factors are simply ignored. Developing objective and rational methods of evaluating these diverse considerations is essential to implementing a quantitative decision-making system.

## 5.0

## NEW CONCEPTS IN THE EA PROCESS

This section discusses two concepts which are complementary and which relate directly to the current EA process and decision-making in general in Northern Ontario. The first concept which will be discussed is what is termed an "ecological approach" (Beanlands and Duinker, 1982(b)). The focus of this concept is on the EA process and the approval of site-specific projects.

The second concept is called an "ecosystem approach" (Anon., 1978(b), 1982(a), (b)). This concept has application to regional resource allocation planning and leads to an operative framework within which site-specific proposals can be evaluated.

An overview of both concepts is provided in the following sections with emphasis on those components pertinent to the context of this submission. Further details on the concepts are contained in the literature cited.

### 5.1 An Ecological Approach: Overview

The underlying concern which led to a recent analysis of the environmental approvals procedures in Canada was the increasingly common complaint by parts of the scientific community that the quality of ecological work contained in EA was below-standard and in some circumstances, irresponsible. Dr. Gordon Beanlands who is employed with Environment Canada was given a leave of absence and through Dalhousie University accepted a contract to review alternative approaches to EA in Canada. This work is now essentially complete although the final report is not expected before the end of March 1983. A number of interim documents (Beanlands and Duinker, 1981, 1982(a), (b)) provide highlights of their results and conclusions.

As a result of this review, they have suggested the followingsix key elements for all EA.

- (1) Peer Review Committee
- (2) Identification of Important Attributes
- (3) Boundary Definition
- (4) Study Strategy
- (5) Impact Predictions
- (6) Monitoring

Each of these components is briefly described.

#### 5.1.1 Peer Review Committee

The authors recommend that a peer review committee be organized at the outset of each EA. The committee's responsibility would be to advise on the technical aspects of the data collection and analysis programs. The primary purposes of this recommendation are: i) to ensure that the ecological data collected will be of long-term value in improving our understanding of project impacts: and ii) to advance the use of effective, up-to-date techniques.

#### 5.1.2 Identification of Important Attributes

It is argued that attempts to cover all ecological parameters is infeasible and meaningless since only certain key attributes may directly influence decision-making. They propose that the key attributes be identified early on in the EA process and that attention should be focussed on those selected.

#### 5.1.3 Boundary Definition

Project boundaries need to be described both spatially and temporally. The boundaries will likely vary for the attributes under consideration and their context of evaluation (eg. administrative, project, ecological, technically feasible). Specific statements on the definition and rationale for project boundaries are recommended to facilitate evaluation of impacts.

#### 5.1.4 Study Strategy

A comprehensive and integrated approach to EA studies is necessary to avoid the current problem of large volumes of information being collected with little potential for inputting it to predictive analyses or for integrating the results. The intensity of data collection programs and alternative collection procedures should be considered during

the study strategy phase. As part of this exercise, basic ecological relationships which need to be described should be identified.

#### 5.1.5 Impact Prediction

A primary conclusion of Beanlands and Duinker was the need to treat components of EA studies as scientific experiments. In this regard, they advocate that testable hypothesis are formulated which lead to quantitative predictions of impacts. They recommend that an explicit predictive framework or model is constructed which can be verified through monitoring the actual impacts of a development.

#### 5.1.6 Monitoring

Monitoring is the operative data collection component of EA studies. Baseline studies which are pre-construction monitoring are used to describe the natural characteristics of environmental variables. Monitoring during and after construction provides information on how given environmental variables respond to the disturbance. A major commitment to both before and after construction monitoring is recommended.

### 5.2 An Ecosystem Approach: Overview

The "ecosystem approach" was advocated by the Great Lakes Research Advisory Board (now called the Great Lakes Science Advisory Board) of the International Joint Commission (IJC) in its 1977 Annual Report. This perspective was advanced since the Board was of the opinion that an integrative framework relating the diverse concerns of the IJC was lacking and current policies dealt with individual problems in relative isolation. This lack of integration was suggested to preclude the IJC from being able to anticipate future problems and to formulate lasting solutions to current concerns. For example, water quality objectives and standards are not interrelated with, or tied to economic or social factors, or based, at least explicitly, on ecosystem interactions. In light of the functional relationships of these sectors in pollution generation and abatement, the Board argued that effective management strategies must deal both at the broad and specific levels simultaneously. A major perceptual shift from man and the environment to man as part of the environment is central to the concept. Complete documentation of the conceptual approach is contained in



various reports available from the IJC (Anon., 1978(b), 1982(a), (b)).

The application of the "ecosystem approach" to environmental assessment has been suggested (Vallentyne, 1982); however, a specific implementation methodology has not yet been developed. A recent draft report (Anon., 1982(b)) begins to examine an implementation procedure of the ecosystem approach for the Great Lakes Basin but the application to the EA process is not discussed.

A key concept underlying the ecosystem approach is the need for a pragmatic and anticipatory approach to environmental issues. This partly is contained in Beanlands and Duinkers recommendation for constructing models and making predictions; however, it goes beyond a project-specific perspective to include also anticipated changes in economic and social parameters as we advocate in Section 6.

In its fullest sense, the ecosystem approach requires a major redirection of our social, economic, and ecological perspectives which will lead ultimately to politics in an ecosystem context. Several criteria are proposed to evaluate the implementation of the ecosystem approach. They are: knowledge of the operation and interrelationships of systems in Nature; and, in consequence of this, the necessity of ecological behavior and the desirability of ethical behavior, based on an ethic of respect for other systems of Nature.

The adoption of the "ecosystem approach" would require a major shift in our view of Society and Nature with associated shifts through many segments of industry and government. While this may be a valid long-term end toward which we should be striving, in the short-term much lesser objectives must be set. Accordingly, we have examined current EA processes in the broad conceptual context of the ecosystem approach as a basis to derive feasible short and medium-term strategies in our proposed approach.

### 5.3 Summary

The ecological approach is directed toward site-specific projects. A principle objective is to organize EA studies in a manner such that, over the long-term, our knowledge and understanding of ecological impacts can be expanded and, therefore, our ability to predict future impacts improved and refined. In addition, Beanlands and Duinker suggest that a systematic approach will lead to more efficient decision-making.

The ecosystem approach relates to resource allocation and the EA process in a broader context and demands that over the long-term, Society must consider itself as part of, and in the context of, the ecosystem as a whole. The full implementation of this philosophy will require considerable time and adjustment; but, components of both approaches offer potential for practical application in the short and long term from both regional and site-specific perspectives.

Section 6 integrates these two concepts with our ideas on feasible improvements to the current EA process.

## 5.0 RECOMMENDED APPROACH FOR RESOURCE ALLOCATION AND ENVIRONMENTAL ASSESSMENT

The following section outlines the modifications to current EA and resource allocation practices in Northern Ontario which we recommend. The approach is hierarchical with the highest level dealing with regional resource planning and the lowest level pertaining to operational environmental management. Through critical comparisons with existing procedures, we have highlighted the strengths of our recommendations. Where appropriate, we also have indicated potential difficulties or weaknesses that require consideration.

### 6.1 Regional Allocation Strategies

The underlying basis for resource allocation is the realization that there are finite limits in terms of natural resources that our environment can provide and wastes which it can accept either in total or on an annual basis. At various levels of exploitation, we are trading off current against future, income and consumption, and the quality of our environment. Effective resource allocation demands explicit consideration of these trade-offs and a conscious decision of the desired course of action.

In the past, simple linear projections of historic trends in demand and growth were often used as the basis for rationalizing future levels of supply which would be required. Resource management focussed on altering the availability of resources, on the assumption that demand was an independent variable. In our opinion, resource management can and should be used to expand the supply of some renewable resources but this ability is finite. A major refocus of resource management is essential; efforts must also be turned to controlling and directing the demands of society, an approach which has already been used successfully in some instances, such as energy conservation. This concept is fundamental to the "ecosystem approach" and will inevitably become a more significant factor in allocation decisions as competing demands on the resource base increase and limits to resource supply expansion are reached.

The change in society's demands can and should be partly achieved through resource allocation strategies themselves. For example, increasing the costs of resources to encourage conservation is one of many tactics which can be employed to achieve these ends.

Comprehensive regional planning must start with the basic issue of projecting future demand and supply and carry both through in terms of short and long-term social, economic, political, and environmental implications. In this regard, the role of resource allocation efforts currently associated with SLUP and the process in general are discussed in Section 9.

A limitation of the current EA process discussed in Section 4.0 relates to its inability to address the issue of incremental changes and cumulative effects. We suggest that only through an overriding comprehensive regional resource allocation strategy or plan can incremental changes efficiently be viewed in perspective. These plans, however, must be constructed in a style such that questions specific to EA can be addressed or that such answers can be derived through analytical procedures. The plans must be flexible and able to make provision for new proposals as well as providing a regional framework within which current proposals and known resource potentials can be rationally developed. In our view, this goal can and should be achieved through the adoption of our proposed approach for regional resource allocation. It consists of eight components:

- 1) Statement of Objectives
- 2) Public Input
- 3) Decision-making Rules
- 4) Identification of Resource Potential
- 5) Quantification of Demand
- 6) Allocation Specification
- 7) Allocation Strategy Approval
- 8) Management and Monitoring

Each is described in the following subsections.

#### 6.1.1 Statement of Objectives

Virtually all planning exercises start out with a statement of purpose indicating broad objectives such as the well-being of citizens, environmental quality, etc. While these general statements are necessary, more specific reference to the relative importance of various considerations is essential, for example, a ranking of the



net benefit, risk minimization, benefit-cost distribution, are recognised decision-making rules. The appropriateness of these measures should be indicated in the study strategy for evaluating specific resource allocations. These measures do not preclude the need for decision-making but provide a consistent framework within which valuations can be presented to decision-makers. In addition, the appropriate measure(s) will likely vary according to the specific proposal being considered.

#### 6.1.4 Identification of Resource Potential

This fundamental step is common to all resource allocation processes. The two points which need to be made here are:

- 1) Plans should identify, in relative terms, the likely temporal sequence of development for a given resource category. This is not an attempt to control rigidly the direction taken by private enterprise which in many cases, ultimately initiate resource development but to provide a general understanding of the expected progression of development according to current and anticipated economic and social conditions. This temporal sequence is important for decisions regarding priorities for resource management programs.
- 2) In the case of renewable resources, a list of currently feasible management practices which might be employed to change resource supplies, and expected relative cost-performance relationship should be part of the resource potential evaluation.

#### 6.1.5 Quantification of Demand

The forecasting of demand has received a great deal of attention in many facets of our economy, yet still, is a major point of discussion. We recommend that demand projections should be based on quantitative formulations which may be revised through varying assumptions or inputs. As part of these projections, the sensitivity of the projects to varying assumptions and inputs should be analysed and considered in the allocation process.

A second aspect of demand projections should be an indication of the quantitative influence that various management strategies might have on demand and the costs associated with various levels of effort.

By stating the basis for demand in this context, it will be feasible in the future to refine projections, to evaluate the potential effectiveness and benefit of management

tactics, and to modify allocation strategies where appropriate. Feedback from more detailed levels of the process will be possible with this type of system in place.

#### 6.1.6 Allocation Specification

For the allocation strategies to be effective, they must be as specific both spatially and temporally, as possible.

The rationale behind this statement is that if many potentially-conflicting demands and environmental impacts are considered and reconciled at the outset of the process, the less modifications to the strategies will be required in the future. Future development approvals will also be expedited if the development concepts have previously been considered at the regional level. In addition, it will encourage private industry to develop designated resource potentials consistent with the overall intent of the strategy.

#### 6.1.7 Allocation Strategy Approval

The regional allocation strategies must be legally approved and binding on industry, government, and the general public. We feel that this condition is essential if public confidence in the plans is to be obtained. An analogy with the planning process in other parts of Ontario is valid in our view. Although the focus of resource plans will vary from conventional land use plans, they do represent a major influence on the lives of northern residents and their environment. Associated with the plans must also be specific implementation tactics and a formal system to modify the strategies as may be required in the future.

Approval of the strategies should be given under the Environmental Assessment Act. Other acts might also be involved for specific components (eg. the Planning Act); in this regard, the Consolidated Hearings Act might be appropriate for carrying out associated formal hearings.

#### 6.1.8 Management and Monitoring

Once the regional resource allocation strategies are approved, a coordinated management program with selective monitoring of potential development sites will be required. An often-cited difficulty with establishing baseline conditions is the limited time preceeding the beginning of construction of a specific development. By carefully choosing monitoring sites, this problem can be overcome to a great extent. Monitoring of the effectiveness of management tactics should be part of this program.

### 6.1.9 Concluding Comments

The implementation of an approach to regional resource allocation as indicated in Section 6.1 has implications for current MNR land use planning programs and the conventional EA process. In Section 9, we describe how we envisage this process could be feasibly implemented and the potential benefits.

## 6.2 Site-specific Development

The current EA process has been applied primarily to site-specific developments. Although approval of such proposals is in fact a resource allocation decision, evaluation in a regional allocation context has been limited. This may be partly due to the lack of comprehensive allocation strategies; however, strategies for individual resources have been prepared in the past (eg. forestry, mining, parks) but have not been applied extensively to EA studies.

The following discussion is premised on the existence of regional plans as described in Section 6.1. Components of the approach are feasible in the absence of comprehensive strategies; however, the overall process would be greatly facilitated by their presence.

The EA process which we propose incorporates modified components of the ecological approach described in Section 5.1 plus new components intended to permit integration with regional allocation strategies. A total of eleven elements make up the process.

- 1) Guidelines
- 2) Peer Review Committee
- 3) Public Input
- 4) Important Attributes
- 5) Levels of Precision
- 6) Boundary Definition
- 7) Predictive Framework
- 8) Study Strategy
- 9) Monitoring
- 10) Social Value Quantification
- 11) Decision-Making Report

Each is described in the following subsections.

### 6.2.1 Guidelines

The purpose of guidelines should be i) to aid in focussing the EA process on key decision-making attributes; ii) to provide the context within which approvals will be based; and iii) to suggest appropriate decision-making rules for project evaluation. Recognizing that guidelines are the first step in the process, it must be expected that modifications will be necessary. However, the guidelines should be as definitive as possible and should be derived to a large extent from the framework provided by the regional resource allocation strategy.

### 6.2.2 Peer Review Committee

Formal input from independent informed scientists both in designing the data collection and analysis programs and in evaluating technical aspects of the completed EA report is recommended through the formation of a peer review committee at the outset of an EA.

A major practical constraint could arise with this recommendation. Our experience has been that scientists, particularly those involved primarily with research, often lack an appreciation of time and budget constraints associated with EA studies, and a professional incentive or interest. Accordingly, review comments while valid in theory are often infeasible in practice. In addition the measures of accomplishments in scientific research are number and scope of ongoing investigations, recently-developed new ideas, and published articles and reports. The repeated practical application of theory offers little professional incentive. This difficulty will require encouragement by employers in terms of career incentives for these types of activities if the issue is to be resolved effectively.

Conversely, practitioners have often demonstrated weak scientific approaches which frequently can be practically improved. For this process to work, a firm commitment must be made by reviewers, the proponents/consultants, and approval agencies to the specific approach adopted in each case.

It is important to note that a peer review committee's responsibility would in no way extend to the consideration of the overall merit of a development proposal. Their purpose would be to advise and critically review strictly technical data collection and analysis methods. We expect that in some cases, substantial compromises will be necessary to reach a common consensus of the Committee and



that the approval agency must play a significant role in this exercise.

Over the long-term, the requirement for peer review committees will lessen. Standard methodologies and reduced need for monitoring will ultimately make the peer review process redundant. We do not expect to reach this level of understanding and consistency for at least a decade.

#### 6.2.3 Public Input

Public involvement similar in approach to that proposed in Section 6.1.2 should be undertaken at this level of analysis also. The citizen representatives may be limited to the more immediate vicinity of the development and the types of concerns addressed will be more specific. However, the requirement for a direct and visible method to incorporate public views will be requisite.

#### 6.2.4 Selection of Important Attributes

We recommend that the EA process adopt a more focussed approach to impact assessment. In this regard, a careful review of the key environmental attributes likely to influence approval decisions should be undertaken through a consultative process involving the proponent/consultants, approval agencies, and citizen representatives.

The generality and scope of past EA reports has been a major weakness. Key attributes from a social value perspective have received inadequate attention; while other parameters, which have no bearing on decision-making, have also been studied.

We recognize, however, that practically, it may prove effectively impossible to reach an unanimous decision on the significant attributes at any point in the EA process, particularly when public interest groups with diverse interests and sometimes ulterior and/or irrational motives are involved. From the perspective of a proponent, a risk must be assumed when a decision to omit a certain ecological characteristic is made. Conceivably, approval agencies and citizen representatives might concur with decisions originally made but at the final hearing before an assessment review panel, an opponent may successfully raise the omission of select ecological parameters.

A risk which can not be readily avoided exists, however, with the existing system of also overlooking a significant consideration. In addition, the loss of credibility is not dealing with key attributes in sufficient detail represents

another potential risk.

We believe that through a joint process of key attribute identification, these risks can be minimized. In addition, the potential benefits in terms of improved efficiency of the EA process and advancing our knowledge of ecological responses are substantial. Decision-makers must recognise these limitations in their deliberations and provide support for the approach, where appropriate.

#### 6.2.5 Acceptable Levels of Precision

Early in the EA process, an explicit statement of the levels of precision or uncertainty which are practically feasible and necessary needs to be made for key attributes or relationships. We are of the opinion that high levels of uncertainty resulting from the absence of extensive background information do not preclude this step but make it more essential. If a quantitative or qualitative assessment of uncertainty cannot be made, then one must question the wisdom of attempting to input such considerations in the decision-making process. The option being to state simply nothing is known concerning certain ecological relationships and responses, and to not consider these factors further in the decision-making process other than to state their existence in risk summations.

Decisions concerning major undertaking with social, economic, political, and environmental implications are based on a broad information and analysis foundation. Each piece of information, however, can be regarded as an approximation, or in other words, has an associated potential level of error or inaccuracy.

The selection of appropriate statistical methods and levels of precision is perhaps the most difficult area for scientists, decision-makers, and the public to reach a common ground of understanding. Scientists have fairly rigorous expectations in terms of acceptable levels of statistical confidence; whereas, the majority of policy decisions are based on what statistically would be considered exceptionally large confidence limits if all relevant variables were considered. A major difficulty is that non-scientists generally do not think in statistical or probabilistic terms and regard most figures as being precise. The use of conventional scientific levels of acceptable statistical precision, however, may have little practical relevance in many environmental assessment decisions.

We believe that society must ultimately make the decision as to the acceptable level of confidence or uncertainty (risk) associated with a given decision. The scientist has two roles to play in this process: i) to point out weaknesses and inconsistencies in proposed risk strategies; and ii) to work within accepted levels of precision when conducting EA studies. Such an approach will mean a much greater and explicit awareness by decision-makers of the constraints faced by practitioners if reasonable levels of precision are to be selected and for practitioners to adopt data collection and statistical techniques compatible with required levels of precision.

The selection of acceptable levels of precision should depend on the magnitude, reversibility, and significance of potential impacts. Increased levels of precision imply increased expenditures of money and time. Reaching a reasonable compromise can only be accomplished through a joint consultation process similar to that for selecting key attributes.

#### 6.2.6 Boundary Definition

Boundaries may vary within the same study according to the parameters under consideration (eg. aquatic, terrestrial, atmospheric, etc.); however, a precise statement of specific spatial and temporal boundaries, and their rationale must be made for each group of key environmental attributes. The selection of temporal boundaries is often the most difficult particularly where long-term incremental changes are involved. No easy procedure can be prescribed but will be dependent on the project and environment under consideration. Approval agencies must play a role in this decision since varying the time horizon may have profound social consequences. An individual proponent cannot be expected to make this decision without government guidance either through specific policy or on an ad hoc basis. Direction in this matter should be provided by resource allocation strategies.

#### 6.2.7 Predictive Framework

Anticipated cause-effect relationships should be initially stated in quantitative terms based on current knowledge. This predictive framework should include details on the mechanisms, magnitude, extent, duration, precision, and probability of anticipated effects. Data gaps and important (i.e. sensitive) relationships will be identified through this process. A major responsibility of the peer review committee will be to identify existing information for initial testing of the framework, and to make

suggestions on its refinement.

In essence, this step consists of constructing a preliminary ecological response model using existing knowledge. If properly carried out, the experimental hypotheses to be tested will be defined at this point.

Over the long-term, sufficient information from past studies may be accumulated to preclude the need for further data collection at this point. In this case, it would be feasible to omit the study strategy and monitoring component, Sections 6.2.8 and 6.2.9 respectively, and proceed to social value quantification in Section 6.2.10. This is one of many long-term benefits associated with the proposed approach.

The predictive framework must also consider non-project-related changes indicated in the regional allocations. For example, a given proposal may reduce the available caribou habitat by a given percentage. If so, this change should be considered in light of other reductions in their habitat which could be anticipated from allocation strategies. By means of this mechanism, cumulative and incremental changes attributable to specific proposals can be considered in a broad context. Interconnections between projects should be considered from the viewpoint of both physical and biological pathways.

After the first impact prediction sequence, various mitigative measures and management tactics may be introduced, if desired. The level of application for each tactic, the potential variability in performance, and the resultant responses of key attributes will need to be specified. This process may be reiterated a number of times until a minimum level of impact, a maximum expenditure on mitigation, or some combination of the two is achieved.

#### 6.2.8 Study Strategy

A study strategy should be declared prior to initiating field data collection programs. In deriving a study strategy for key attributes and relationships, a variety of experimental alternatives ranging from direct measurement to indirect indicator species should be considered. The selection of the best alternative will be dependent on time and budget constraints, practical limitations of measurement, and the extent of supportive documentation for analogous comparisons.



An experimental alternative often overlooked in EA studies is the derivation of ecological responses through comparative analyses. In many cases, similar developments to that proposed have been built years earlier in comparable settings. By examining the current status of key attributes at a number of sites, it may be feasible to infer long-term ecological responses to the proposal in question. Biologists have often neglected this potential information source, the argument being that the lack of preconstruction information precludes valid comparisons. If a large number of cases are available, this argument can be rejected; however, a paucity of comparative studies exist for most types of developments and environments common to the North.

The study strategy should set out in detail which experimental alternative will be used, the level of precision expected, how the data analysis will be conducted, and specific tactics to be employed for data collection. A component of the study strategy should be the initial design of a monitoring program before, during, and after project construction and operation. It is the results of this exercise which will permit predictions to be tested and the program must, therefore, be at least as rigorous as the predictive techniques to be employed.

#### 6.2.9 Monitoring

Monitoring is the term used to describe the physical operation of collecting on-site environmental data. Three temporal divisions of monitoring can be described, namely:

- i) Baseline or pre-construction
- ii) During construction
- iii) Post-construction

In terms of advancing knowledge of ecological response to environmental disturbances monitoring is by far the most important aspect of the EA process, yet is often the most neglected or misdirected. If adequate pre-, and post-construction data base has been collected, at any time in the future, alternate existing or new predictive models can be applied. This validation process is essential to refine our understanding of environmental impacts. The current lack of such data is the single greatest obstacle to advancing the state of the art in environmental impact prediction.

Monitoring may be conducted for two purposes. First, in order to establish the initial preconstruction conditions for the predictive framework and to verify predicted

impacts, monitoring data is essential. Secondly during and post-construction monitoring is often carried out for operational decision-making in terms of required ongoing mitigative measures to maintain a given level of environmental quality. The requirements for the two applications may be quite different. In this section, our focus is on the former purpose.

Monitoring often is one of the most costly components of the EA process. A variety of factors influence the costs but obviously as the required number of attributes, level of precision, and length of record are increased so are the costs.

For these reasons, monitoring programs should be designed to achieve specific ends that are directly related to the decision-making process. A proportionate commitment should be made to monitoring at all stages of a project adequate to meet the requirements of the predictive framework and the study strategy.

#### 6.2.10 Social Value Quantification

In Section 4.4.10, the argument was presented for converting physical quantities of ecological factors to some common unit of value. Arguments can be made to convert to both dollar and non-dollar units, either of which in theory is acceptable, provided all factors under consideration for the decision are expressed in similar units. For convenience sake, many factors are normally expressed in dollar terms; accordingly, this unit may be preferable. Biologists and other environmental scientists should take an active role in this step to ensure that consistent conversions of quantities are made, and that appropriate conversion methodologies are used. Because of the reluctance of many scientists to address this subject, past experience is quite limited and considerable refinement of conversion methodologies is feasible. By implementing this step, full integration of the factors involved in approval can be readily achieved, encouraging the goal of quantitative decision-making.

The valuation process should take consideration of the regional resource allocation strategy. If the supply of a given resource is predicted to be in limited supply within a region, its associated economic and social value will increase. In addition, through the statement of objectives, decision-making rules, and quantification of demand, direction for the valuation process will be provided. Consistency between the two levels of analysis will be essential. As part of the valuation, temporal

variation of values should be considered in light of the regional strategy and overall forecasted trends.

#### 6.2.11 Decision-making Report

The actual EA report should be as concise as possible and limited to key environmental attributes likely to influence decision-making. Extensive descriptions of a wide range of environmental variables should be eliminated. The key attributes and the rationale for their selection should be presented. Physical impacts and their potential range should be quantified over discrete time intervals. Proposed mitigative measures and management tactics should be specified in terms of level of effort and potential variation in effectiveness, and new physical impacts predicted.

The physical impacts should be described in relation to their significance to overall resource allocation strategies and, if appropriate, proposed allocation modifications.

The social value of the physical impacts should be stated for both the mitigated and unmitigated case as well as the costs of mitigation.

No interpretation of the acceptability of impacts should be made. Acceptability implies a judgement of value which we have suggested is the responsibility of society and its decision-makers. The relationship of predicted impacts to provincial standards or stated resource objectives should be stated. The proponent may wish to state the economically-feasible range in terms of overhead or front-end costs and the related acceptability of potential conditions that might be imposed for environmental reasons.

During and post-construction monitoring, if proposed, should be specified in terms of responsibilities, methods, frequency, and duration with a specific statement of the hypotheses to be tested by the program.



### 6.3 Class Environmental Assessments

The major focus of this submission is at the regional resource allocation and major development scale; however, several comments pertaining to Class EA are in order.

The methodology set out in Section 6.2 is equally applicable to Class EA with the difference being in the level of effort. For example, the majority of projects approved as Class EA would not require an extensive monitoring program except perhaps for operational purposes. Monitoring for select experimental projects would be carried out for a limited number of cases where predictive precision needed improving or the performance of mitigative measures was to be tested.

We believe that a similar predictive and quantitative approach is equally applicable for Class EA, the difference being that the required level of precision may be less for those cases where the magnitude of impacts is small and the effects reversible; however, because of the similarity between Class EA projects, the development of standard methods and comparative analyses will be expedited.

An important consideration is the recognition that although the attributes effected and the magnitude of the impacts may be small in many Class EA, the level of damage required to lead to refusal of approval is also less. Accordingly, the selection of key attributes should take cognisance of the size and risks of a project.

Depending on the size of the project, an extensive public involvement program may not be warranted. The public should not be excluded, however, if they request to participate.

### 6.4 Operational Environmental Management

The adoption of our proposed approach for individual major projects will lead to many factors previously considered being excluded. The rationale for excluding these elements is that they are not of sufficient significance to effect project approval. At the same time, they do require attention, if small-scale impacts are to be avoided.

In many EA reports, factors such as dust, noise, garbage and sewage disposal are addressed by either:

- i) prescribing standard control measures, or
- ii) indicating that the situation will be monitored and



control measures used if required.

Both approaches lead to the conclusion that no significant impact will result. Needless to say, these types of statements are difficult to test and provide little direction or regulation of environmental management measures.

We propose that these types of recurrent operational considerations should be regulated outside of the formal EA approval process. Instead, a manual of standard practices should be prepared that would stipulate i) acceptable control practices for a given problem; ii) a basis for selecting appropriate mitigative measures; and iii) the characteristics of operational monitoring programs required to measure associated environmental responses.

The manual approach has proven effective in the case of forest management, storm water management, and erosion and sediment control. If necessary, government policy could be used to implement these measures.

**ANALYSIS OF CASE STUDY**

Section 6.0 describes a modified approach to resource allocation and EA for Northern Ontario but it may be difficult for readers to conceive how these principles might be actually applied. The Onakawana Development proposal was selected as a case study to illustrate how the site-specific development approval approach could be implemented and the implications for the existing EA process. Section 7.0 consists of three subsections, the first being this introduction, followed by an overview of the proposal, and finally, a review of how a modified EA process would be implemented according to the steps set out in the proposed approach.

Onakawana was chosen as a case study since much of the work on the environmental studies has been completed and a draft EA report has been prepared. Initial economic and engineering studies suggested that a generating station using lignite as fuel was an economic proposal for the site. Recent more detailed analyses have indicated a net cost for the generating station. Ontario Hydro, as a result, has cancelled its plans to build a generating station. Onakawana Development Limited still retains a lease on the deposits and are examining alternative means of economically-utilizing the resource.

The EA report summarized in the following sections was based on the original proposal and is therefore out of date. This fact does not detract from the value of the Onakawana proposal as an example since the majority of the EA process in terms of studies and reports had been completed prior to the project being reconsidered. Conversely, an opportunity to apply some of the recommendations contained in this submission may arise if the project is reactivated.

This analysis is not intended to be a critical appraisal of the Onakawana EA process, but rather a demonstration, by means of an example, of the practical constraints and potentials in applying current and proposed methodologies to a real-life situation. Additionally, this review should not be construed to represent the position of the Canadian Society of Environmental Biologists with respect to whether approval should be given for the proposal.

## 7.1 Overview of Proposed Development and Draft Environmental Assessment

This section is a summary of the draft Environmental Assessment Document prepared in support of the Onakawana Project Proposal. Much of the text has been excerpted directly from a summary of the EA prepared by the proponents. Several parts have received minor editing for brevity. Readers interested in specific details are referred to the original complete draft (Anon., 1981).

Onakawana Development Limited proposed plans to design, construct, operate and maintain a surface mine at Onakawana, where a lignite deposit is located. Associated with development of the mine, the construction and operation of a thermal generating station was proposed by Ontario Hydro to convert the lignite to electrical energy, and transmission facilities to deliver the electricity.

Ontario Hydro worked jointly with Onakawana Development Limited in the preparation of conceptual engineering and feasibility studies, and the gathering and interpretation of environmental information relevant to the proposed undertaking.

### 7.1.1 Purpose of the Project

The purpose of this undertaking is to develop an indigenous energy resource, described as the Onakawana lignite deposit, in order to increase provincial energy security and self-sufficiency, and contribute to the promotion of regional economic development. The proposed undertaking is expected to achieve these objectives by increasing the indigenous energy fuel supply, by providing a large number of construction and operations jobs for local residents and by increasing regional revenue through purchase of local materials and services.

A government task force formed in the early 1970's recommended the main criterion for proceeding with the lignite development should be "the contribution that the proposed development will make to the economic and social well-being of the people living within the region". More recent support for the project is contained in the final report of the Royal Commission on Electric Power Planning which concluded that, "For the purpose of enhancing power system flexibility (i.e. adaptability to changing load patterns), on grounds of fuel security and bearing in mind also the employment possibilities, the project should be undertaken".

### 7.1.2 Project Description

The site of the proposed mine and generating station is situated between the Abitibi and Mattagami Rivers, approximately 100 km south of Moosonee. No road access to the site exists or is planned. The Ontario Northland Railway line which traverses the site will be used for the transportation of personnel, materials and equipment.

#### 7.1.2.1 Mine

The lignite deposit at Onakawana is found in three fields, two of which are proposed for development. The estimated in-situ reserves for these two fields totals 180 million tonnes. A land area of approximately 2000 ha will be disturbed by the mine operations.

Mining will consist of three phases. The construction and pre-production phase will include:

- construction of mine service buildings, lignite stockpile areas, primary crusher house, mine haul roads and electrical distribution system;
- forest clearing and initiation of the ditch-drainage system for muskeg dewatering and to direct water away from the mining areas;
- removal of muskeg over areas to be mined initially; and
- diversion of the Onakawana River into the Abitibi River at Barebones Island to facilitate mining activities (this diversion will be permanent).

During the operations phase, the mining plan will employ the dragline turnover cut method whereby overburden is stripped and placed in the adjacent pit after the lignite is mined. Prior to stripping, muskeg will be predrained, excavated and removed to muskeg dumps. Lignite will be loaded into dump trucks and transported to the generating station receiving hoppers. A 500,000 tonne stockpile will also be established and maintained in the vicinity of the generating station. The mining rate will vary over the life of the mine, peaking at approximately six million tonnes annually during the first years of operation, decreasing linearly over a thirty-year period to a rate of about three million tonnes annually.



Ash from the generating station will be buried in mined-out pits under a mantle of overburden. Water from the mine pits and muskeg drainage will be collected and treated before discharge to receiving waters. During the operations phase, a portion of the upper reaches of Medicine Creek will be rerouted to facilitate mining.

The reclamation phase will be carried out as the mining operation proceeds to minimize the environmental effects and to develop a post-mining environment which will be self-sustaining and compatible with the surrounding undisturbed area. The final landscape will consist of undulating hills separated by a lake-pond system which will drain into the lower Onakawana River.

The preferred mine plan was selected after considering the technical, economic and environmental implications of several alternatives. Alternatives evaluated included methods for muskeg and mine drainage, stream diversions, overburden removal, lignite excavation, waste disposal and reclamation.

#### 7.1.2.2 Generating Station

The powerhouse and associated facilities will be located adjacent to the mine development alongside the existing Ontario Northland Railway Line. The site will occupy a land area of approximately 570 ha which lies to the west of the Abitibi River. Major components of the station will include the powerhouse, lignite storage and handling facilities, ash handling system, switchyard and transmission egress corridor, cooling water system and waste management facilities. The powerhouse will accommodate three 375MW units, each unit comprising a turbine hall, auxiliary bay, bunker bay, boiler room, precipitators and exhaust ducting leading to a common stack.

Initial capacity factor of the nominal 1100MW generating station is expected to be 70%, decreasing linearly to 30% after thirty years of operation.

Cooling water for the condensers will be drawn from and discharged to a land-based man-made cooling pond approximately 450 ha in area. Makeup water for the pond and water for other station requirements will be obtained from the Abitibi River. Heat transferred to the condenser circulating water system will be dissipated by evaporation, convection and radiation at the pond surface. A once-through cooling system using an impoundment created on

the Abitibi River near Blacksmith Rapids is considered feasible but will require additional evaluation before being considered an acceptable alternative.

Combustion products will be discharged to the atmosphere through a single multi-flue stack. Particulate emissions will be controlled by electrostatic precipitators. Burner design and combustion controls will result in low emissions of nitrogen oxides. The fuel sulphur content is low and flue gas treatment for sulphur dioxide removal is not proposed. Provision has been made in the station design for future installation of a scrubber system if required.

#### 7.1.2.3 Transmission Facilities

An existing 115kV transmission line running beside the Onakawana site will supply initial power to the construction site and mine. Twelve months prior to the first unit in-service date, a new 500 kV line from Pinard TS will be required to supply power for mine dragline operation.

The requirements for system incorporation are two 500 kV single circuit transmission lines between Onakawana GS and Pinard TS, a distance of 95 km and one 500 kV single circuit line between Pinard TS, Porcupine TS and Hanmer TS, a distance of 365 km. The transmission lines between Onakawana and Pinard will follow a new route requiring a right-of-way 122 m wide. Between Pinard and Hanmer the new line will parallel the existing 500 kV facilities, requiring extension of the existing right-of-way by approximately 55 m.

Transmission lines will be constructed using 'V'-guyed, single circuit steel lattice towers. The lines will tie into existing transformer stations and will not involve acquisition of new property at the station sites.

#### 7.1.2.4 Project Workforce

The construction workforce for the project is expected to peak at 1800 persons. During operations the workforce will be about 500 people, although only one-half of the operating staff will be present at the site at one time.

There is no plan to create a new town at Onakawana. The construction and operations workforce will live in on-site motel-style accommodations. Workers from existing communities in the Cochrane District will be transported by commuter train to and from the site.

The construction workforce will generally work six days per week, eight or nine hours per day. They will remain at the site for periods of either six weeks or longer prior to taking a one week leave. In general, management, administrative, technical and clerical staff will work twelve hours per day, from 8 am to 8 pm for three days a week. The three working days will be staggered. Operating and maintenance personnel will likewise work twelve hour shifts, 8 am to 8 pm or 8 pm to 8 am for alternating three and four days a week to arrive at an average forty-two hour workweek.

### 7.1.3 Environmental Studies

#### 7.1.3.1 Public Involvement Program

Programs were initiated by Onakawana Development Limited and Ontario Hydro in communities throughout the study area to ensure the public was kept informed about the project as studies progressed and to provide opportunities to solicit, document, discuss and react to the community issues and concerns.

Onakawana Development Limited's primary thrusts were through the media, information centres and meetings and presentations with provincial ministry staff and citizens' advisory groups comprised of municipal officials, Native Peoples, interest groups and business organizations. Information and display packages, including slides and movies, were shown at many of the meetings and receptions. Tours of existing coal strip mining operations in Western Canada and the United States were organized for interested government officials and Native community leaders.

Two municipal liaison committees were organized by Ontario Hydro to participate in the generation planning aspects of the project. Membership included elected and non-elected officials from communities along the Highway 11 corridor and in the southern James Bay area. A third citizens' committee participated with Ontario Hydro in the planning process which led to the selection of the proposed transmissions route. Other public contacts included media coverage, householder mailings in selected communities, distribution of newsletters and status reports and public information centres.

Staff from the Royal Commission on the Northern Environment and other provincial government ministries have monitored the public involvement programs.

#### 7.1.3.2 Site Environment Studies

Field studies were conducted at Onakawana between 1978 and 1980 to describe those features of the natural environment and associated resource use which would potentially be affected by development of the proposed mine and generating station. Earlier studies were conducted by the Ontario government in 1972 through Task Force Onakawana in anticipation of a lignite mine at some point in the future. The following discussion is based on the more recent studies by the proponents.

##### Atmospheric Environment

Measurements of atmospheric stability indicated neutral conditions fifty-six percent of the time (on an annual basis), stable conditions thirty percent and unstable conditions fourteen percent. Mixing heights at Onakawana are high in summer but quite restricted in the winter due to the movement of cold Arctic air into the area.

The air quality measured at Onakawana was relatively free of pollutants and comparable to other remote regions of Canada.

##### Aquatic Environment

The proposed mine and generating station are located adjacent to the Abitibi River, a major tributary of the Moose River which flows into James Bay. The presence of muskeg over most of the site limits drainage and the water table is quite uniform and near the surface. Two small streams, the Onakawana River and Medicine Creek, flow through the site area.

The quality of surface waters monitored at Onakawana generally met the Provincial objectives for protection of aquatic life and recreation. Muskeg drainage tended to be more acidic than larger rivers.

Benthic invertebrate communities in the Abitibi and Onakawana Rivers were quite diverse and indicative of good water quality. Twenty-six species of fish were found in the rivers near Onakawana. Lake sturgeon, walleye, northern pike, sucker, and brook trout were the most common. Spring spawning activity was observed in the Abitibi River and the mouth of the Onakawana River. Fluctuating water levels limit the available fish habitat in the Abitibi River.



## Terrestrial Environment

The Onakawana lease lies within the Hudson Bay Lowland Subregion which is characterized by level to undulating topography with little relief except along river valleys. Soils are predominantly organic (muskeg) with some mineral soils near river banks where drainage is improved. The coal bearing beds are contained within the Mattagami bedrock formation which is overlain by glacial and interglacial deposits of till, marine clays and surficial peat (muskeg).

Vegetation is typically subarctic in appearance; the Hudson Bay Lowlands form part of the Boreal Forest Region. The project area is characterized by open bog (51.5%) and open to closed forested peatland (37.4%) which extends over the expanse of poorly-drained muskeg. More productive coniferous and mixed coniferous-deciduous forest occur on better-drained mineral soils along river banks and alluvial terraces.

Wildlife populations are generally not abundant due to low vegetation productivity and poor habitat diversity. Moose are the most common big game species and their population density is low; woodland caribou are also occasionally present. Beaver and marten are the most important furbearer species; muskrat, mink, lynx, otter and fox are also present. Black bear and wolf are the only large predators present, but appear only in small numbers and in limited habitats. Few waterfowl stage or breed at the site due to absence of open water. Sandhill cranes are common near Onakawana and are potentially sensitive to disturbance by mine development. All upland bird species are relatively abundant (concentrated along watercourses), but are not unique to the Onakawana area. Several raptor species exist in the area including red-tailed hawk, sharp-shinned hawk, American kestrel, osprey, and great gray owl, but all are present in low densities.

## Resource Use

Land and resource use planning in the Northeastern Ontario Planning Region in which Onakawana lies, is administered by the Ontario Ministry of Natural Resources and local government bodies. Within this region the mining and forest industries predominate but existing activities are located a considerable distance south of Onakawana. The mine lease occupies a small portion of the Moose River Forest Management Unit. Agriculture is not practised near Onakawana because of restrictions imposed by drainage,

soils and distance to markets. Commercial, domestic, and sports fishing are limited in nearby river systems because of low fish productivity and difficulty of access. Although beaver and several other furbearers are harvested commercially in the region, trapping in the Onakawana region is primarily recreational. Trapping provides primary employment to less than five percent of trappers in Northern Ontario. Hunting is also primarily recreational or for subsistence living, with moose and black bear being the major game species. Non-consumptive recreational activities are limited to canoeing and other forms of wilderness pursuit. No parks or reserves are proposed in the future for the project development area.

#### 7.1.3.3. Human Environment

The Territorial District of Cochrane is considered the area which would be most affected by development of the mine and generating station. The transmission route will be located within the Districts of Cochrane, Timiskaming and Sudbury and the Regional Municipality of Sudbury.

Populations in this area are sparse, with the majority of the people located in towns or hamlets around larger centres. Numbers have remained stable due to slow economic growth and out migration. The dominant ethnic group is French although Native people comprise an important demographic component. The level of school education in the Cochrane District is below the provincial average.

Noteworthy communities in the Cochrane District include the City of Timmins, Cochrane, Kapuskasing, Smooth Rock Falls, Iroquios Falls, Moosonee, Moose Factory and several smaller settlements. Communities in proximity to the transmission route include small settlements along the Abitibi and Mattagami Rivers to Cochrane and Smooth Rock Falls, the City of Timmins and small communities south between Timmins and Sudbury.

The major industries in the region are mining, forestry, tourist-based recreation and service industries. Though these primary and service industries are relatively active, unemployment is higher than provincial averages, especially among Natives. Average annual income levels in some areas rank below the provincial average, despite high weekly wages, because of the seasonal nature of work and low participation rates. Occupational diversity is fairly low, based on a narrow industrial structure. The Ontario government is offering financial assistance to private enterprises in an attempt to diversify economic activities

and encourage long-term stability.

#### 7.1.3.4 Transmission Route Planning Studies

The transmission study area extends from Onakawana to Sudbury and crosses three major physiographic regions; the Hudson Bay Lowlands, the Abitibi Uplands and the Cobalt Plain. Population densities are generally low with the exception of the Cities of Sudbury and Timmins. Mining and forestry are the primary resource-based industries. The wilderness environment throughout the study area provides good opportunities for recreational pursuits.

The transmission route planning study was undertaken by Ontario Hydro with the assistance of a Citizens Committee. The functions of this group were to establish a study area boundary, review and input to the environmental and land use data, identify areas the route should avoid, rank these areas in an order of priority, choose and evaluate route alternatives and propose the most acceptable route.

#### 7.1.4 Environmental Effects and Mitigation

##### 7.1.4.1 Mine and Generating Station

The assessment concluded that there will be no unacceptable short or long-term environmental effects associated with the development of the Onakawana Project. There will, however, be several unavoidable, minor project-related effects.

##### Atmospheric Environment

- Fugitive dust emissions from construction and coal-handling activities may cause minor increases in suspended particulate concentrations near the project site. These will be minimized using dust collection systems and suppression programs.
- Ambient noise levels at the site boundaries will be slightly elevated but will not exceed established criteria for noise control.
- Operation of the cooling pond will result in slight increases in localized fogging.
- The point of impingement concentrations of SO<sub>2</sub>, NO<sub>x</sub>, and total suspended particulates will not exceed the provincial standards as set out in Regulation 15 of the Environmental Protection Act. However, there may be minor violations of the one-hour provincial ambient air quality criteria for these contaminants with a 15km





radius of the station, during infrequent inversion breakup episodes.

- Emissions from the generating station will provide a small contribution to acid precipitation in central and northern Ontario and western Quebec (up to about six percent of background loadings). However, station emissions will come under the Ministry of Environment regulation which limits total system emissions of  $\text{SO}_2$  and  $\text{NO}_x$  from all Ontario Hydro thermal generating stations.

#### Aquatic Environment

- There will be minor increase in suspended and dissolved solid loading to Medicine Creek, the Onakawana River, and the Abitibi River during construction and operation. However, the provincial water quality objectives in these streams will not be exceeded.
- Aquatic habitat in the lower 23km of the Onakawana River will be permanently reduced due to river diversion and cooling pond construction. The loss of fish habitat may be partially offset by providing fish passage facilities and habitat improvements at the diversion and the mouth of the Onakawana River. Canoeists using the Onakawana River will have to portage across to the Abitibi River at the diversion.
- There will be a small increase in peak surface runoff from the mine and generating station development areas; however, this will be controlled to reduce erosion and particulate loadings to nearby rivers.
- Stream flows in Medicine Creek will be slightly reduced after mining is completed, due to diversion of the upper reaches into the post-mining drainage system.
- The post-mining drainage plan will provide diverse aquatic habitats including lakes, ponds, marshes and interconnecting streams, suitable for fish, waterfowl, furbearers, and recreational boating. Drainage from the reclaimed area will flow into the lower Onakawana River.
- The water intake and cooling water system may cause some entrainment mortality of fish and other aquatic organisms in the Abitibi River. This will not be significant, given the low flow requirements.
- The small increase in acid loadings due to station emissions is not expected to have a measurable effect on lake acidification rates in potentially sensitive areas.

#### Terrestrial Environment

- Mining activity will result in the vertical mixing of overlying sediments with an increase in bulking, pore space and permeability. Three new groundwater aquifers

will be formed separated by two non-mined strips. Regional groundwater quality will not be affected by mining operations. The topography will be altered through mining and reclamation, from a homogeneous bog/marsh plain to a diverse terrain of hills and lakes that will be an average of two to four metres above the pre-mining surface and have relief four to seven times greater. Landform instability studies of the post-mining landscape will be conducted at Onakawana during the mine life to ensure stability and foundations meet required standards.

- Although large areas of soil must be stripped away during mining, they will be replaced during reclamation by a mixture of overburden and muskeg which will improve soil drainage and be a more productive growth medium. Measures will be taken to minimize erosion accompanying soil removal.
- During project construction and mining operations, little vegetation removed will be stocked forest land (valuable to forestry and wildlife). To minimize impacts, merchantable timber will be salvaged in advance of clearing. Clearing will be done progressively to reduce the amount of unvegetated land existing at one time, and disturbed areas will be revegetated as soon after excavation as possible.
- Potential direct impacts on wildlife during construction include mortality or displacement of resident on-site wildlife; displacement of resident animals from habitats adjacent to noise and/or activity areas and increased hunting pressures. The enforcement of shooting and hunting controls, and the use of noise abatement devices on equipment will alleviate some of these effects.
- Although wildlife may also be affected indirectly during mining by habitat removal (and consequently by increased habitat utilization pressures on adjacent undisturbed areas), low animal populations at Onakawana and present under-utilization of most of the existing habitats will make this impact small.
- Post-mining habitat development will enhance wildlife populations by increasing the area of open water on the minesite (beneficial to water birds and semi-aquatic mammals); by providing greater topographic (north and south-facing slopes) and vegetative diversity for wildlife; and by providing movement corridors around the perimeter of the project site by means of overburden embankments along river and creek diversions.
- The concentration of air pollutants emitted from the generating station will be sufficiently low to prevent damage to forest vegetation.

#### 7.1.4.2 Transmission Facilities

The preferred route (1500 m wide) will avoid most areas where potential adverse environmental effects could occur. During the centre-lining phase, there will be additional opportunity to avoid remaining sensitive areas. Such areas include canoe routes, trout and walleye streams, historical or archaeological sites, ski trails, moose-feeding areas, waterfowl nesting and staging areas, aggregate deposits, timber regeneration sites and residential developments. Other measures which will be used to minimize the effects of transmission line construction include timing of construction activities, selection of appropriate equipment and methods, application of special protection measures and compensation.

#### 7.1.4.3 Project Socio-Economic Effects

Residents of the Cochrane District are expected to fill approximately forty percent of the total employment opportunities associated with the mine and generating station development. This includes about six hundred and twenty construction-related and two hundred and fifty operating positions. Approximately fifty percent of the job opportunities (two hundred and eighty positions at peak employment) associated with the construction of the transmission line are expected to accrue to residents in the Cochrane, Timiskaming and Sudbury Districts. Few "non-local" workers are expected to take up residence in the region during the construction phase. Approximately three hundred people are expected to move to communities in the Cochrane District during the operations phase. Existing community services are adequate to support this influx.

Local communities will benefit from increased cash flows associated with wage expenditures. Annual payroll spending in the Cochrane District is expected to average \$7.3 million during construction and \$3.5 million during operation. Wages paid to "local" workers during the transmission line construction will total approximately \$25 million.

The project is expected to create approximately seventy secondary or "spin-off" employment opportunities within and outside the Cochrane District during construction and approximately thirty during operations. Local businesses are expected to supply a proportion of goods and services to the project throughout the construction and operating phases of the project.



The attraction of skilled workers to the project may cause a short-term decline in the level of services in nearby communities due to the inability to fill vacancies. However, as these vacancies are filled, the level of skills and experience of the local labour pool is expected to increase. Employment training programs will be implemented to provide improved opportunities for long-term employment. The provision of permanent jobs will add stability to existing annual and seasonal employment fluctuations in the Cochrane District.

Social pressures, particularly in Native communities such as Moosonee, may increase due to higher disposable incomes and potential in-movement of individuals and families from northern coastal communities (ie. closer to the job market). Native peoples will be encouraged to participate in the project development through direct on-site employment opportunities (and training programs) or indirect opportunities such as providing goods and services. The isolated nature of the project site will minimize interaction with Native communities, thus ensuring maintenance of traditional lifestyles.

Site development will result in a minor loss of local trapping income and hunting and fishing opportunities. Wilderness aesthetics will be reduced in the vicinity of the mine and generating site and along the transmission right-of-way. Development of the lignite deposit could also stimulate the exploitation of other mineral resources in the region such as limestone, gypsum, fine clay and silica sand.

#### 7.1.5 Conclusions

It is the conclusion of the environmental assessment that the proposed undertaking will satisfy in a highly-acceptable manner the project purpose; it will contribute to the provincial goals of increased energy security and self-sufficiency and to the increased development of northeastern Ontario. Conversion of the lignite to electrical power rather than other gaseous or liquid products is currently the only viable use of this indigenous resource.

Adequate consideration has been given to design alternatives throughout the planning stages to ensure the proposed project represents the most attractive means of developing this resource from a technical, economic, and environmental point of view. This conclusion recognizes



that some project alternatives (eg. cooling water system and atmospheric emission controls) may undergo further analysis and refinement. Any such revision will be reviewed in detail with the Ministry of the Environment (MOE) before the design is finalized.

With the proposed environmental control and protection measures incorporated in the project design, residual environmental effects will be minimized and acceptably small in comparison to the benefits of the project.

## 7.2 A Comparison: Actual versus Proposed Approach

The following sections examine the various steps in the Onakawana EA process under the headings of the proposed approach (Section 6.2). In some cases, we have had to infer the actual process where specific documentation was lacking. For several components of the proposed approach, no corresponding section existed in the actual EA and therefore, our comments are necessarily brief. Examples have been provided to illustrate key points.

The purposes of this section are:

- i) to demonstrate for the specific example of the case study, the changes which would have been necessary to have used our proposed approach; and
- ii) to highlight the potential benefits of our approach in comparison to current practices.

### 7.2.1 Guidelines

Draft guidelines were prepared for the mining component of the proposal by MOE early in 1978 (Burdett, 1978). We were not able to confirm if final guidelines were released and our comments therefore pertain to the draft version. In addition to the MOE guidelines, Onakawana Development Ltd. (ODL) prepared a summary of "Proposed Field Investigations..." (Edwards, 1978) which were "intended:

- to provide MOE with a better understanding of the proposed project
- identify the significant areas of environmental impact

- to develop a consensus with MOE that we have anticipated, where possible, all of the major impacts and that our proposed environmental program will collect the background information necessary for preparing an environmental assessment."

A third document concerning guidelines for EA was sponsored by the Royal Commission on the Northern Environment (Anon., 1978). Specific guidelines for the generating and transmission facilities were not obtained and, therefore, no comments can be made in this regard.

The guidelines prepared by MOE are typical in their attempt to be all inclusive. However, the Onakawana example must be viewed as exceptional in that MOE had previously sponsored the Task Force Onakawana studies in 1972 (Lammers et al., 1972; Mackintosh et al., 1972; Stanfield et al., 1972). Accordingly, a considerable effort had gone into studying the area specifically from the perspective of the existing natural resource base and the potential extraction of lignite. In fact, the MOE coordinator for the EA had personally participated in the preliminary field studies and report preparation. Even with this unusually-good understanding of the environmental setting of the undertaking, the guidelines issued provide no preliminary focus.

For example the guidelines request that the proponent prepare "a description of,

- i) the environment that will be affected or that might reasonably be expected to be affected directly or indirectly;
- ii) the effects that will be caused or that might reasonably be expected to be caused to the environment; and
- iii) the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate, or remedy the effects upon or the effects that might reasonably be expected upon the environment, by the undertaking, the alternative methods of carrying out the undertaking, and the alternatives to the undertaking".

This descriptive exercise was required at varying levels of detail for all alternatives considered for the site. A checklist of factors to be included was appended; it appears to have been composed based on the idea of including every conceivable factor with no indication of what might be more important; how importance and significance might be determined; or the feasibility of predicting ecological responses for any or all of the

parameters. In fact the author(s) stated "[the] list should not be considered an all-inclusive one..." indicating a desire for an even broader scope than specified in the guidelines.

A major portion of the guidelines was devoted to the issue of alternatives to the proposed undertaking and how they should be dealt with. The discussion suggested that the process is an iterative one with less feasible alternatives being progressively eliminated and the remaining alternatives being investigated in progressively more detail. While this is the essence of any project design exercise, if the guidelines are interpreted literally, the volume of documentation required to trace the process step by step is staggering. One must question whether this is efficient from a decision-making point of view or whether indepth documentation of the undertaking, its impacts, and the benefits and costs, including social, economic, and environmental factors is not adequate with a listing and prioritization of alternatives considered and eliminated.

Most essential elements comprising our proposed approach are lacking including identification of important attributes, required level of precision, formulation of testable hypotheses and models, monitoring study requirements, conversion of outputs for decision-making, and a context to review incremental changes. Non-specific references were made to some ecological processes and spatial boundaries; however, the issue of temporal horizons was not broached. Design optimization is the essence of the alternatives evaluation process, but no direction is given to the proponent how trade-offs between environmental, and social and economic concerns should be made in selecting preferred alternatives. Passing reference was made to the decision-making process, although to our knowledge, the decision-making rules remain as elusive today as when the guidelines were written, leaving the proponents in the unenviable position of trying to second guess the system.

The guidelines prepared for the Commission are generically the same as those developed by MOE. In Section 4.0 of their report, the author(s) noted minor methodological discrepancies that may or may not be valid; however, the key elements missing from the MOE guidelines were likewise missing from both the generic biophysical guidelines and those specific to the Onakawana proposal.

The Proposed Field Investigations prepared by ODL can be viewed as an attempt by the company to reduce the generality of the MOE guidelines and to develop a set of specific issues to be addressed; although their effectiveness in this regard may be questioned. Several of the subsequent steps of our proposed approach are also addressed in this document and they will be discussed in the following sections.

#### 7.2.2 Peer Review Committee

No mention was made in the documentation available to us of the existence of, or consideration being given to, the formation of a peer review committee. The principle participants appear to have been the proponents and their staff experts, consultants to the proponent, and MOE. In the transmission route selection component, a citizens committee was formed but this is quite different and does not replace the need for a technical review committee.

#### 7.2.3 Public Input

Public involvement was undertaken for various components of the EA. A direct connection between public comments and project design was described for the transmission facility route selection. We discuss in Section 7.2.10, the strengths and weaknesses of the technique used, but suffice to say that the approach is progressive and is in the direction which we recommend. In the case of the mine and the generating station, no mention of a similar system is made and the means whereby public comments and opinions were input was not described. Why the quantitative approach was used in the one case and not the others, could not be determined. A common approach to all similar elements of the EA would have facilitated comprehension by decision-makers and the general public.

#### 7.2.4 Selection of Important Attributes

We have no record of a response to the ODL submission of "Proposed Field Investigations..." but assume that they did serve as a basis for identifying important attributes. This document went beyond this purpose and actually served partially to establish boundaries and to design a study strategy. The following series of four questions were posed by ODL to provide focus to the data collection programs.



- a. Will the effect be site-specific or wide-spread?
- b. Will the effect be reversible or irreversible?
- c. Will the effect be of short or long duration?
- d. Will the effect be positive or negative relative to the values of the primary social elements to be considered?

In the context of these questions, the first step in the screening exercise was to construct a conventional environmental impact matrix with qualitative assessments made for each factor in terms of both significance and magnitude of impact. Associated with this preliminary assessment, background documentation pertinent to the EA was reviewed and annotated.

Despite this exercise, the new set of parameters proposed by ODL appear to be almost as broad in scope and as general as those prepared by MOE. The primary difference between the two is that ODL set out a specific purpose for examining each major environmental category. Based on this document, it appears that no effective identification of key attributes with respect to the decision-making process was achieved.

#### 7.2.5 Acceptable Level of Precision

Throughout the EA report, numerical values were cited and in some cases, means and ranges were provided; however, readers were given no insight as to the potential error associated with these values. Given this omission, the discussion of selecting an appropriate level of precision is limited. We note, however, that level of precision does not refer to a strict statistical treatment of data but may be based on explicit judgemental estimates of likely ranges and probabilities. This requirement becomes most pronounced where a series of interactions are being considered, each with a degree of uncertainty. A simple summation or review of ranges is not appropriate to assess cumulative effects of these uncertainties on final predictions; likewise worst case scenarios are unrealistic. This is the primary reason for requiring these considerations to be expressed quantitatively.

Associated with an acceptable level of precision, is the issue of the intensity of field sampling programs. No rationale was given for the level of effort of sampling programs. It could be argued either that the sampling program was too intensive or not intensive enough without some measure of the ultimate level of precision deemed appropriate. To use scientific requirements for

statistical significance, as argued earlier, is an inappropriate or impractical decision rule for most cases.

#### 7.2.6 Definition of Boundaries

A variety of spatial boundaries were referred to in the report. The immediate mine site, generating station, and transmission corridor were the areas most likely to be directly impacted and were examined in detail accordingly. From a resource base point of view, the Northeastern Region of MNR was frequently used as a reference for discussion. Hydrologically, the upstream watersheds of the rivers were considered. The atmospheric dispersion study boundaries extended right across Ontario and parts of Quebec. Visual study area boundaries were defined according to sighting distances of the generating station stack.

Spatial boundaries on the basis of ecological considerations, (eg. wildlife ranges and populations, fish migration and recruitment, etc.) do not appear to have been used. The study area for wildlife extended considerably beyond the immediate development although no rationale for selecting these expanded boundaries was given.

In the case of the revegetation plan, the rate of recolonisation of mine spoils was discussed; however, associated responses by wildlife are not predicted. This is important, since a potential benefit of the proposed undertaking claimed by the proponents, was an improvement in wildlife habitat over current conditions. A 30 year life expectancy for the entire development was stated.

With the exception of the above two examples, the issue of temporal boundaries was not addressed. The rate of adjustment of impacted ecosystems and the duration of impacts was not discussed. Although projections concerning the final reclaimed state of the mine and generating site were clearly set out, no indication of the length of time required for a more or less steady state to be achieved was given. From a decision-making perspective, this may be quite significant if twenty to thirty years after the operation is completed, the natural reclamation process is still underway. In simple benefit-cost terms, benefits or costs a long time in the future have less value and therefore, a temporal component is essential to weighing accurately benefits and costs.

In summary, where readily definable physical boundaries or where preconstructed models with embedded boundaries exist, they were used. For less definitive factors such as fish

and wildlife explicit boundaries were not rationalized or described. Temporal boundaries were not generally discussed although a reference was made to the concept in the field studies program design.

#### 7.2.7 Predictive Framework

Dynamic physical systems such as atmospheric dispersion and hydrology have received considerable attention in the past and accordingly pre-constructed models are available for specific applications. In these cases, complete project-physical environment relationships are in place. Direct interaction with the design process is feasible and model output is conventionally the basis for design decisions such as sizing, operating plans, etc. The design approach for emission control and hydrological modifications and structures used these techniques. The data collection programs were designed to provide the essential input data to operate these models.

Conversely, biological relationships were described in qualitative terms and were related either to habitat loss or direct disturbance. No evidence of an interconnected and predictive framework such as that used for atmospheric dispersion or hydrological modeling was apparent for biological systems. The absence of such relationships may be partially explained by the lack of focus on important attributes and the complexity of describing interactive relationships for all biotic components.

For the mining and generation sites, simple areal values of disturbed habitat were used as the primary measures of impact. For example, in the case of aquatic habitats, the EA report states:

"Diversion of the Onakawana River is expected to have the most significant effect on freshwater biota. Effects may include:

- temporary alteration in water quality and disturbance to local aquatic habitat and their associated biota through drawdown, dredging and excavation; and
- alteration to the lower 20 km of the river, and associated alteration and reduction of aquatic habitat.

The impact of Onakawana flow volume on Abitibi flows below the diversion will be insignificant, although



concentrations of a number of water quality parameters may increase negligibly. Fish passage facilities at the diversion drop structure, which will be constructed if future studies indicate it is necessary will ensure that no negative effects accrue to Onakawana River fish populations.

Alteration of the headwaters of Medicine Creek during mine development should not present a serious impact on aquatic life because the affected stream length is proportionately small and precautions will be taken to reduce the deterioration of downstream water quality."

Reviewing these impact predictions, it is difficult to envisage the type of post-construction monitoring program which could be used to validate such predictions. Descriptive evaluations such as "insignificant, negligibly, serious" do not lend themselves to evaluation. The statement "ensure no negative effects accrue..." implies zero risk which can be invalidated without further study and the statement "alteration to the lower 20 km of the river..." will not require field study to validate since it is an integral part of the site development plan. Unless more precise descriptions of predictive frameworks are given and predicted impacts are presented in quantitative terms prior to the assigning of value judgements (i.e. significance), it will be infeasible to improve our knowledge over the long-term of the accuracy of predicted impacts associated with major developments.

In the case of wildlife, the areal loss of habitat is converted to numbers of animals based on reported densities. For example, "Land clearing and other construction activities will remove 2000 to 3000 ha of habitat (and displace low densities of key wildlife) which could be expected to support one moose; single breeding pairs of red-tailed hawks, osprey and great gray owls; and five breeding pairs of sandhill cranes (based on density estimate for the large 1000 km<sup>2</sup> area)". Another example "Diversion of streams will remove aquatic habitats and complementary upland vegetation types supporting beaver, muskrat and otter. Based on regional lodge count data, mine development will affect river habitat supporting at least eight beavers on Medicine Creek and at least 11 beavers on the Onakawana River (Task Force Onakawana, 1973). To minimize human:scavenging predator (bear, wolf, fox) interactions, garbage will be disposed of promptly and safely, and the success of predator deterrence will be monitored to determine if additional measures are warranted". As with the area of aquatic habitat affected, extensive monitoring programs could not validate these



statements. If the actual numbers were proven to be more or less, we can see no easy means to modify the predictive technique for application in other cases. The monitoring results might permit a statement on the precision of the original data base, but little else.

The lack of quantitative treatment of impacts other than those attributable to direct removal precludes future possibilities of improving our predictive accuracy for a range of indirect effects which may be equal or much greater in magnitude than direct impacts. Associated with this comment, is the question of whether the level of effort expended to collect information on the natural environment is justified in light of the final application of the data. Or, conversely, was the level of effort adequate to provide a basis for impact prediction. This dilemma is discussed further in Section 7.0.

#### 7.2.8 Study Strategy

A comprehensive study strategy is not set out in either the "Proposed Field Investigations" or the EA report. Mention is made of data analysis but how this will be achieved is not specified. As reflected in the original study guidelines, each component of the natural environment appears to have been addressed somewhat autonomously with no overall strategy for analysis and integration.

No indication of alternative approaches to studying key environmental attributes was noted in the EA report. The field study program as outlined by ODL (Edwards, 1978) consisted essentially of direct measurement approaches. Since the major focus was descriptive with respect to ecological interactions other approaches such as indicator species or small-scale experiments would have had little applicability.

The revegetation program represents an exception to these comments. In this case, an on-site experimental program of field tests using soils representative of expected spoil material were carried out to test various seed and fertilizer mixtures for survival and growth characteristics. In addition, mention was made of comparative analyses with similar sites in Western Canada and the United States.

The fact that these approaches were used only in the case of revegetation, supports our contention that the complexity and poor understanding of most ecological systems is a primary obstacle in EA. The science of revegetation has a relatively long history with close links

to agricultural sciences. In addition, realistic experiments are relatively simple to conduct. As the science of environmental impact prediction develops, we expect a similar trend to evolve, the end result being a reduced demand by biologists for extensive data bases and greater attention being focussed on key attributes.

#### 7.2.9 Monitoring

As discussed earlier, the primary approach to analysing natural environment factors consisted essentially of resource descriptions; the major focus of pre-construction inventory program was in accordance with these methods. A major proportion of the effort was directed to cataloguing the presence or absence, and location of a large number of species. The potential relationship of this data base with post-construction measurements was not discussed.

Passing reference was made to ongoing monitoring once the project is activated; however, no specifics were given. It may be that other documents were prepared detailing monitoring programs, but they were not referred to in the EA report. The value of monitoring programs from the viewpoint of validating the predicted impacts is highly questionable given the limitations associated with the available baseline data and the nature of the predictions reported. However, during and post-construction monitoring may be useful, but only, for operational purposes of problem identification.

#### 7.2.10 Social Value Quantification

For those ecological impacts associated with the mine and the generating station for which predictions were given, no attempt was made to relate these losses in terms of other project considerations with the exception of furbearers. In this case, it was stated that "[the] loss of these portions of the traplines will not significantly affect the region's fur harvest. Based on regional harvest data, these traplines contribute approximately \$391 and \$816 on the average respectively to the annual fur harvest. The development is not expected to significantly affect fur production and harvest capabilities in adjoining off-site lands." Interestingly, these values have no apparent direct relationship with the quantitative predictions quoted in Section 6.3.9 of the draft EA.

The question remains as to how decision-makers can be expected to utilize the majority of the results reported for the natural environment in reviewing the approval of

the project. In simple terms, the results could either be examined in order of relative magnitude compared to regional values and dismissed from further consideration. Or, if they were carried through in reaching a net weighing of benefits and costs of the proposal, the decision-makers would be left with the task of converting the various impacts to some comparable units. No direction in the EA report was given as to the approximate aggregate value of the environmental impacts predicted nor was an attempt at developing a weighting scheme made.

Despite this fact, internal Ontario Hydro reports attempting to weigh the merits of alternative generating station designs (Anon., 1981(b)) converted environmental costs to dollar terms. The specific conversion process was not cited but this does demonstrate that for quantitative judgements to be made, this exercise is mandatory.

In the case of the transmission corridor, evaluation of diverse environmental and social parameters was achieved using the following approach.

"The environmental objectives were ranked in an order-of-priority-to-avoid. The rank order was established by the [Citizens] Committee and reflects their perceptions of both the relative importance of the various resources to the study area and their relative sensitivity to the types of disturbance anticipated in this project.

The ranking was undertaken in two stages: first, a within-factor ranking to establish the relative importance and sensitivity of 'like' environmental objectives; and second, an overall ranking to determine the order of priority for all twenty-nine objectives. The initial ranking was undertaken by members of each subcommittee whereas the overall ranking was established by the Committee as a whole." Then "for graphic purposes, the 29 ranked environmental objectives were grouped into six classes of constraint to assist in the identification of alternative routes with least overall impact on identified concerns. The underlying planning assumption is that each environmental objective constitutes a reason for avoiding a particular unit of land within the study area. The higher the ranked position of the objective, the more important the reason for avoiding that unit of land."

Through this process of ranking and weighting, the transmission corridor representing the least net impact was selected. Various revisions through more detail analysis and public participation occurred; however, the basic



analytical framework remained the same. The result of this analysis was that the proposed route selected "involves the least cost route in the southern and central sections. In the north section, N4 would cost approximately \$1 million more than the least cost route. This additional expenditure is warranted on the basis of the environmental benefits, particularly the opportunity to avoid new intrusions on the viewshed of the Polar Bear Express." This statement indicates that the environmental impacts avoided by this route were considered to be worth \$1 million or more. In this case, the tradeoffs between economic, and social and environmental costs were quite simple since the best route from all concerns coincided over much of the corridor. If more divergent preferences had resulted, a more rigorous treatment of the relative values of the social and environmental factors would have been necessary.

In general, we support the type of approach used in the transmission corridor selection process to assign social values to biophysical parameters, but note two technical weaknesses.

First, in assigning the relative importance or weight of the variables prioritized by the ranking system, a constant proportion was assumed. For example, the relative importance ratio between the highest ranked environmental factor and the second highest factor is equal to the ratio between any other two consecutive factors in the ranking. The likelihood of this assumption being valid is remote and does warrant improvement in future exercises.

The second limitation to the approach was the imposition of strict spatial boundaries by means of a grid cell display of environmental variables. The definition of boundaries according to ecological factors was precluded and permitted essentially only direct physical disturbance impacts to be considered. This approach is reasonable for transmission corridors where the overriding impacts are in the immediate vicinity of the corridor; however, the technique has limitations for other types of development where the boundaries of the impacts are not as precise.

#### 7.2.11 Decision-making Report

The decision-making report represents the culmination of all the activities leading up to formal review of the proposal. In light of the differences noted in the preceding comparison, a critical review of the draft EA from the viewpoint of a decision-making document is potentially redundant. Several important points, however,



are worthy of note.

The sheer volume of the EA report would tend to intimidate all but the most dedicated reader. In examining the content of the report, a large proportion related to descriptions of existing conditions. As mentioned, a focus on key attributes and their quantitative relationships would provide much easier access to the major findings.

Chapter 10 of the draft EA summarised the conclusions. In the case of water quality impacts, it was stated that "the provincial water quality objectives will not be exceeded in these streams.". Where standards exist, such statements are valid; however, in the summary of "Residual Effects", it was stated that "[this] study concludes that there will be no unacceptable short or long-term effects associated with the development...". The question of acceptability is the essence of the EA process and is an issue society in general must decide. In the absence of standards, the proponent can only validly state the quantitative predictions derived and their estimated social value. Decisions of acceptability must be made through the formal EA review or some other form of government policy.

To compare the proposed hierarchical approach in full, a regional resource allocation strategy would need to have been in place for the case study. The proponents did make reference to the Strategic Land Use Plan for Northeastern Ontario prepared by MNR, although it was not consistently used as basis for comparison.

Extensive projections of the changes in the work force, the local economy and related spinoffs are made, but no projections are made to the future value of the Onakawana area in a natural state, assuming that the development were not to proceed. The simple explanation for this omission is that the complexity of undertaking such an analysis imposes practical constraints. In order to make accurate projects, assumptions concerning the availability and quality of similar types of resources to meet future demand must be made. Depending on the activity under consideration, for example wilderness canoeing, users may come from quite distance origins. In theory, one must consider how the array of choices available to this and other potential user groups will change relative to current conditions. This is more than can be expected from a proponent of a site-specific development such as the Onakawana proposal, yet, such information might be of considerable importance in reaching a rational decision on the proposal.

What is the alternative? It is in this role that the resource allocation strategies would provide a basis for evaluation. An accounting of known renewable and nonrenewable resource potentials, and associated allocation decisions based on government objectives and policies, would permit proponents to assess generally the significance of predicted changes in a regional context. If necessary, mitigative measures could be proposed to meet specific government objectives stated in the plans.

8.0

**CASE STUDY: FEASIBLE IMPROVEMENTS**

The following discussion examines the overall implementation of a modified EA process for the Onakawana project from the viewpoints of the proponent, and approval agencies, in particular MOE. We believe that it would have been feasible for each of the key elements in the modified approach described in Sections 4.0 and 5.0 to have been employed to various degrees in the assessment. However, we have focused this discussion on those modifications which would offer the greatest return with the least alteration in terms of level of effort and scheduling.

**8.1 Selection of Important Attributes**

Representatives of the proponent, government, and the public should have convened at the beginning of the EA process and identified the key variables which were expected to influence decision making. This list would then have been included in a set of guidelines prepared by MOE: i) stipulating the level of precision required; ii) requesting rationales for study area boundaries both spatial and temporal; and iii) outlining the types of information required to consider approval of the application (eg. quantitative predictions of biophysical impacts; converted impacts to social values; where appropriate, level of mitigation proposed and net reduction in both biophysical impacts and their social values; and risk or uncertainty associated with predictions and mitigation).

By implementing such an approach, it would have been feasible to reduce greatly the amount of documentation associated with the EA and ensure that the maximum benefit was returned for the effort expended in researching and analyzing the development proposal. Much of the descriptive material relating to various elements of the environment which would likely have no significant bearing on decisions concerning approval could be deleted (eg. presence descriptions of bird, small mammal, furbearer, and fish species). Along the same view, the field work program could have been focused on key elements (eg. species having substantial economic and/or social value such as moose), making it feasible for the same total level of effort to be much more precise, in terms of predicting responses and impacts.

Caution in implementing this approach is warranted. In adopting these suggestions, the proponent would be depending on the open support of both government staff and citizen committees, and on their willingness to accept mutual responsibility for making the best judgements possible. At the final approval stage, those involved in the original selection of significant attributes must be prepared to stand accountable for their choices, particularly if an objector to the proposal attempts to suggest that important attributes have been overlooked. This type of argument can be countered to a certain extent by clearly documenting the initial selection process and providing public access to the final selection early in the approval process.

An alternative method of implementing this approach would be for proponents to fund but not solely supervise the preparation of the FA; instead, an independent group which might include some representatives of the proponent would accept responsibility (Anon., 1980 ). A peer review committee could also report to the supervisory organization. Although there are a number of practical constraints to this approach, it would remove the potential for accusations of bias in selecting important attributes.

## 8.2 Study Strategy

A considerable expenditure of time and money was made on collecting information on the biotic environment. We question the value of much of this effort. The representativeness of a single or several years of data is questionable particularly with systems characterized by high natural variability. In addition, without an analytical framework to integrate the data and to interpret the results in a form suitable for decision making, the primary purpose of the data appears to be simply to convince reviewers that a thorough job has been done.

In our opinion, the information collected was not extensive enough to establish reliable baseline conditions. Going part way toward establishing baseline conditions is no better than no attempt from a scientific perspective and hence, from a practical perspective is ineffective use of effort and money. The onus for this strategy should not fall solely on the proponent as it was somewhat necessitated by the initial guidelines prepared by the government. A comprehensive study strategy would have brought this issue to light prior to commitments being made and would have necessitated some



reconciliation.

In setting up experimental hypotheses, the proponents did undertake revegetation plot tests as a means of designing appropriate treatments and seed mixtures for application to the mining spoils. The atmospheric and hydrological predictions may also be viewed as testable hypotheses. Other predictions are basically untestable.

A common argument raised in undertaking baseline studies is that they are not feasible within the scheduling constraints of most projects. Certainly, this argument must fail in the case of Onakawana. Task Force Onakawana was established in the early 1970's which would have provided adequate time to prepare a meaningful environmental data base if a committed effort had been made. The biological reports which were prepared were acceptable for a first year reconnaissance but fall far short of describing the ecological dynamics of the area. As we recommend later in the submission, we see a need for government to play an active and essential role in guiding future baseline studies.

### 8.3 Social Value Quantification

In the case of the transmission route selection process, a partial conversion of biophysical and resource use impacts was achieved. Additionally, Ontario Hydro did assign monetary values to environmental impacts associated with the generating station. We feel that a similar process for the impact of the mining operating and an explicit statement of the methodology and results for the generating station would have clarified and integrated the various impacts predicted. We recognize that much contention might have been raised on an appropriate procedure; however, we reiterate that for a decision to be made, an accounting or weighting of diverse concerns is necessary. We are simply advocating that the weighting or comparison be explicitly made.

#### 8.4 Regional Context

Impacts to the resource bases and associated resource users are said to be insignificant; however, as we have noted, a question of context arises. Since the regional SLUP report is the only document comparable to a comprehensive regional plan for the area, we would advocate that the incremental effects associated with this proposal be related to SLUP resource allocations and targets. By this means, the future relative impact of the mining and generating facility could at least be partially assessed.

In making this recommendation, we do not suggest that SLUP reports are ideal for this purpose. In Section 9.3, we discuss the limitations of current MNR programs for this type of application.

9.0

**IMPLEMENTATION OF PROPOSED APPROACH**

Section 8.0 examined for the Onakawana project feasible modifications to the study which would, in our opinion, greatly facilitate a sound decision making process. In this section, we present our views on what changes are necessary to implement the modified approach throughout the North and perhaps, other parts of Ontario.

The section is divided into three parts. The first examines the responsibilities which proponents of developments in the North would need to assume to implement the approach. The next subsection examines the responsibilities of government, and the final subsection elaborates on our perspectives of what criteria comprehensive regional plans must meet.

9.1

Proponent Responsibilities

Based on our experience, we are of the opinion that industry will welcome a definitive and quantitative approach to predicting environmental impacts, assigning social values, and decision-making, if it will reduce the time required to meet government requirements. Over the long term, the approach we are advocating will achieve each of these ends.

In the short term, proponents must be prepared in some cases to compromise primarily by means of lengthened schedules preceding construction to permit adequate baseline conditions to be established. In most cases under the current process, if preconstruction monitoring is begun immediately at the outset of the conception of the development, sufficient time will elapse prior to construction to serve this purpose. In the case of the Onakawana project, the lignite deposit was known since the 1940s, and initial field studies were begun in the early 1970's. Onakawana Development Limited began environmental studies in 1978 and construction is still at least several years off.

We recommend that funding for detailed monitoring in many cases be primarily a government responsibility; however, an initial commitment by proponents in funding detailed monitoring and analysis could be of value in stimulating government action. The expense of preparing the normal EA report should remain the responsibility of industry. Financial support by proponents for the peer review process would facilitate implementation and would be in the immediate interest of the proponent; the cost is expected to be a small percentage of current expenditures on environmental studies.

The most important responsibility of proponents will be to support the modifications to the EA process we are proposing. Government will be unsuccessful in unilaterally attempting to implement the system. However, if one is prepared to recognize that formal environmental reviews and approvals of development proposals is a permanent process of government, the benefit to proponents of improving the precision and efficiency of impact prediction is obvious.

## 9.2 Responsibilities of the Ontario Ministry of the Environment

Demonstrative support for the concepts embodied in the modified approach is the first and most important step in implementing the process. The support must be reflected consistently through the EA process starting with the preparation of guidelines and ending with the completion of post-construction monitoring and data analysis. To effect this support, MOE staff both at the management and operational levels must understand and accept the basic underlying principles and philosophies of the approach. An often-cited concern with explicit quantitative approaches is that the pervasive political influence in decision-making confounds the process; however, we argue that political considerations are part of the system and in no way preclude the need for or the viability over the long term of systematic predictive approaches to EA.

More specific responsibilities which MOE will need to assume include the following. During preparation of guidelines, the Ministry must show a willingness to stand committed to views on key environmental attributes that a proponent should address, as opposed to preparing comprehensive catalogues of potential environmental effects. Key attributes as suggested in previous sections of this submission need not be selected solely by MOE, but Ministry representatives must be prepared to support the attributes chosen through whatever method is deemed appropriate. Without this support, it is highly unlikely that a proponent will be prepared to risk following this recommended approach alone. In this regard, MOE must adopt a more active role in the actual conduct of EAs. This is feasible if a credible peer review system and a more precise method of quantitative impact prediction and valuation are established. Rather than providing critical reviews of EA reports, they would serve as facilitators.

Although the reports by Beanlands and Duinker propose that each EA should be approached on an experimental basis with requirements imposed for establishing precise baseline and post-construction conditions, we feel that this is



impractical. First, collecting adequate data to define baseline conditions requires a much greater commitment of time and effort than has been normally required of proponents in the past in Ontario. Secondly, where similar projects are proposed with similar impacts on similar environments, the net return expected from baseline and monitoring studies in terms of improving knowledge is much diminished. Finally, for smaller projects, the proportionate cost of these studies in relation to total project budget would be disproportionately high.

Instead, we propose that MOE should, in cooperation with proponents, judiciously select representative projects in terms of type of operation, environmental setting, etc., and that for those selected, intensive monitoring be undertaken. This detailed monitoring would be focused on several key environmental attributes as opposed to attempting comprehensive coverage, and would be continued for a specified period before, during, and after construction and operation. An integral part of this exercise will be the formulation and testing of predictive techniques.

We do not feel that the proponent of a project selected for intensive study should be responsible for the exceptional financial burden which is implied. We do recommend that proponents of projects selected for intensive monitoring are required to commit to the program an amount of funds equal to that which would be expected for monitoring under normal conditions.

Our rationale for this proposal is that the benefits of the detailed monitoring will accrue to proponents of many other projects and society as a whole. Funding must either be provided from public revenues or a special levy must be imposed on all projects being reviewed under the EA process and the income from the levy applied to these studies. It has been our experience that the latter approach may not be acceptable in our parliamentary financial administration system.

Another primary responsibility, which MOE must assume in our opinion, is developing accepted methods of assigning social values to predicted biophysical impacts. We are not ignorant of the difficulty and controversy associated with this process, but we are committed to the view that quantitative decision-making demands that this exercise be undertaken. As was demonstrated, it was necessitated and done, perhaps somewhat covertly, for some aspects of the Onakawana project and that once completed, it assisted in facilitating straight-forward decisions. To advance capabilities in this

area, acceptance by government of the concept and stimulation of investigation on the topic is requisite.

A final requirement in the EA process which needs to be implemented regardless of the adoption of our recommended approach is the development of standard rules of practice in dealing with recurrent site management issues relating to environmental impacts. In the case of the Onakawana EA, many of the site-specific impacts identified as potentially occurring were immediately dismissed by statements such as "To minimize human:scavenging predator (bear, wolf, fox) interactions, garbage will be disposed of promptly and safely, and the success of predator deterrence will be monitored to determine if additional measures are warranted."

Similar examples are available for erosion and sediment control, water quality and waste handling, dust and noise control, etc. In our view, these types of measures should be regulated as standard procedures. We do not feel that an extensive discussion of such issues contributes significantly to decision making for specific proposals. Although most EA reports often do discuss in detail site management controls, most are already regulated under existing legislation. If desired, an appendix or schedule to the EA could simply list appropriate site management procedures for the project.

The need for these types of standard rules is more pronounced in the case where the EA is focused only on significant attributes which will have a major bearing on project approval. In this case, mitigative measures will need to be designed specially to achieve a specific level of protection as demonstrated through modification of the parameters of the predictive framework. Impacts not covered explicitly by the EA will either be insignificant or readily mitigated through the application of such standard practices. One class of significant impact which would arise if this system were applied would be those changes which could not be adequately mitigated through standard practices.

#### 9.4 Comprehensive Resource Planning

Repeated reference has been made to the need for comprehensive resource planning to establish a context within which individual projects can be evaluated and to provide orderly direction to development in the North. The following paragraphs set out what we see is required to achieve this objective, both in terms of the actual composition of plans and their formulation and administration.

The ongoing SLUP and District Land Use Plan (DLUP) programs of MNR need to be recognized as a pioneering attempt at initiating a framework for the orderly allocation and management of the natural resources of Ontario. The results of this exercise may have profound effects on Northern communities and resource development. The scope and effort committed to the program is impressive; however, despite good intentions, in our view a number of serious deficiencies are present which will limit the practical application of the plans to the issues which we have raised.

There is need for appropriate legislation to permit enforcement of resultant plans (The membership of the Society does not comprise legal experts; however, many members on a daily basis deal with both the Public Lands Act and the Planning Act and we are therefore familiar with their content and application. Accordingly, we do not suggest that the following comments should be viewed as legal interpretations of the legislation, but as reflecting a considerable amount of practical experience.). The Public Lands Act administered by MNR is not designed for dealing with regional interministerial planning matters. Similarly, the Planning Act administered by the Ontario Ministry of Municipal Affairs and Housing is designed to direct and control land use in municipal areas and does not deal with resource allocation and management issues nor does it pertain to Crown Land.

We do not feel that the Public Lands Act is appropriate for administering regional plans for the following reasons.

- a) The Act contains no provision for public appeal process. Policies and regulations under the Act are developed and implemented solely at the discretion of the Minister. Under the Planning Act, specific steps are stipulated that must be followed to change land use designations including public notice or consultation. To enforce implementing regulations of regional plans, a public appeal process will be necessary in our opinion.
- b) The Act does not apply to private lands except under special conditions where temporary Ministerial orders can be issued.

Despite the shortcomings of the Public Lands Act, strong arguments can be made for designating the Ontario Ministry of Natural Resources as the agency responsible for coordinating comprehensive regional planning in the North. In the eyes of many Northerners, MNR is the "government" since virtually all of the land is Crown, and because of the close relationship



that exists between northern economies and community structure, and the resource base. MNR offices are distributed throughout the North and have been present for a long period of time; this presence would facilitate public communication and administration of policies and regulations. The primary control over the economic development of the North rests in the control of MNR since northern development for the foreseeable future is closely linked to natural resource utilization.

If comprehensive resource plans of the form which we suggest are developed for the North, it will be vital that they are reviewed under the Environmental Assessment Act, or that any new legislation introduced makes provision for a similar review process. The Consolidated Hearings Act might be used to review the plans under several acts simultaneously.

A final concern relating to current SLUP and DLUP programs is the lack of precise quantification relating to resource targets, both from the point of future demand by resource users and future potential supply. If the EA process we are proposing is adopted, it will be necessary to rely on regional planning documents to provide the basis for projecting quantitative supplies of, and demands for resources as part of the social valuation process. Regional plans will also be instrumental in selecting spatial and temporal study area boundaries. Unless a sufficiently explicit basis for developing supply and demand predictions in the regional plans is provided, testing of resource utilization alternatives, deriving significance of incremental changes, and applications of social values will be infeasible. Explicit quantitative foundations for regional plans will have the added benefit of facilitating modification as the need arises.

Features of comprehensive regional plans which we recommend include the following:

- a) The plans should be as specific as possible in identifying resource development areas. Associated with this process, baseline analyses could be initiated for key areas reducing future potential scheduling conflicts with project development.
- b) For specific areas, an initial ranking and weighting of environmental concerns similar in a general sense to the ranking derived by Ontario Hydro for the transmission route selection process should be set out. Proponents of specific projects will then be provided with preliminary guidance as to significant attributes needing



consideration. The ranking may well be modified during the specific EA process; however, this exercise would relieve some of the difficulties in selecting significant attributes for a specific site and would provide insights as to priorities and allocations for other areas.

#### 9.4 Benefits of Approach

The following list is not inclusive but contains some major benefits which we foresee in the adoption of our proposed approach to resource allocation and environmental assessment.

- a) Existing potential interministerial conflicts between regional resource allocation policies and site-specific development approvals could be effectively resolved or at least a mechanism for resolution would be in place.
- b) Public confidence and participation in resource allocation and management would be enhanced through direct legal avenues of input and appeal.
- c) Current schedules for project approval would be reduced over the long term with concomitant decreases in the costs of studies associated with the EA process.
- d) Long-term protection of environmental quality and the renewable resource base would be achieved by resolving the user demands on resource supplies prior to significant reductions in quality occurring.
- e) An improved knowledge and information base concerning northern environments would be realised permitting greater precision in the prediction and mitigation of significant environmental impacts, reducing overall risks of undesirable effects, and leading to more efficient design, mitigation, and management strategies.

## 10.0

## RECOMMENDATIONS

It is recommended that:

- 1) The hierarchical approach to resource allocation and environmental assessment described in this submission be immediately adopted in principle and components be implemented as quickly as is practically feasible.
- 2) Guidelines for all EAs encourage the formation of peer review committees; identification of key environmental attributes; set out requirements for quantitative impact predictions; stipulate acceptable levels of precision; request social valuations of biophysical impacts; and, where appropriate, stipulate intensive baseline and monitoring data collection programs.
- 3) A manual of standard practices for the northern environment be prepared dealing with regularly recurrent and pervasive construction and operation impacts and appropriate mitigative measures.
- 4) A fund or permanent government program be established in collaboration with private sector funding to sponsor intensive ecological monitoring programs and associated data analysis exercises pertaining to significant environmental impacts and mitigative measures.
- 5) Potential future resource development sites be prioritized in terms of their anticipated monitoring requirements and monitoring programs be initiated sequentially starting with the most important.
- 6) Legislation to initiate and implement comprehensive regional plans for the North be introduced and enacted as soon as possible. The legislation should make the plans binding on industry, government, and the general public and should include a formal public review and appeal process.
- 7) Responsibility for coordinating, implementing, and enforcing regional planning in the North be assigned to the Ministry of Natural Resources.
- 8) All resource and land use plans in the North be reviewed under the Environmental Assessment Act or new legislation enacted for that purpose.

- 9) A long-term goal of the EA process be to optimize new data requirements and the precision of impact predictions for individual development proposals.

11.0

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primary purposes and, ideally, the specific relative importance of each in resource allocation decisions. We recognize that these priorities and weights may change with time but a clear statement at the outset will encourage direct discussions.

If properly-formed, this statement of objectives will facilitate the identification of important attributes and social quantification of values at more detailed levels of analysis. The objectives should also be a primary basis for decision-making at approval stages.

#### 6.1.2 Public Input

In Northern Ontario, the social and economic framework of the communities is closely tied to the resource base and overall environmental quality. The heightened awareness of some Northern residents to environmental factors will facilitate discussion of the principles of resource allocation and EA, yet, at the same time, articulation of personal objectives in terms of policy and resource allocation may be limited due to language and perceptual barriers. A major role of the overall process must be to provide an amicable and accessible vehicle for the expression of the aspirations of these communities that is not intimidating and offers visible direct connections between general principles and specific results. It is also important that the full implications of alternatives are demonstrated through the planning and approval process in order that a reasonable compromise between short-term interests and long-term options can be reached.

Public involvement must be encouraged at every step and every level of the process. By utilizing predictive approaches to the supply and demand of resources in combination with quantitative expressions of citizen opinions, integration can be accomplished and clearly illustrated. The approach used by Ontario Hydro for the siting of transmission corridors is an example of a partial approach to quantifying public opinion (see Section 7.3.10).

#### 6.1.3 Decision-making Rules

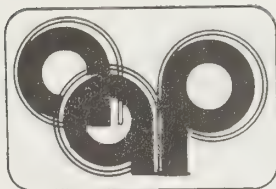
Decisions on resource allocation and development rests and should rest ultimately in the hands of elected officials. In most cases, this responsibility is delegated to either appointed boards and tribunals, or to individual ministries. Decisions are usually based on stated objectives such as those recommended in Section 6.1.1; however, various measures of achievement of a given objective can be applied. For example, cost effectiveness,





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NATIVE AFFIRMATIVE ACTION PROGRAMS

IN RESOURCE

BASED INDUSTRIES



A Submission to the Royal Commission  
on the Northern Environment

By

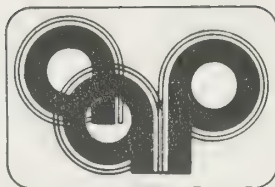
Paul Scott  
Chief  
Affirmative Action  
Ontario Region  
Canada Employment and Immigration  
Commission



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Immigration Canada

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Thunder Bay, Ontario  
February 22, 1983



NATIVE AFFIRMATIVE ACTION PROGRAMS  
IN RESOURCE BASED INDUSTRIES

A Submission to the Royal Commission on  
the Northern Environment by:

Paul Scott  
Chief  
Affirmative Action  
Ontario Region  
Canada Employment and Immigration  
Commission

The purpose of this submission is not for the Canada Employment and Immigration Commission to make recommendations to the Royal Commission on the Northern Environment on the allocation, use or management of natural resources in Northern Ontario. Rather, the Ontario Region of the Commission wishes, through its Affirmative Action Division, to present to the Royal Commission a summary of the steps which have been taken in some jurisdictions to ensure that local residents and particularly Native Indians benefit from the employment opportunities which are sometimes created when resource development takes place. In particular the submission will detail the ways in which Affirmative Action Programs have been, and can be, used by employers in the resource development industry to integrate local Native workers into their workforces.

The submission will therefore address two of the questions which were posed by the Royal Commission when these hearings were scheduled: what approaches towards development in the major resource-based industries could increase benefits and reduce negative environmental impacts in Ontario north of 50°? And what alternative approaches towards natural resource allocation, use and management could help to strengthen the economic and social base of communities in Ontario north of 50°? In answering these questions we, of course, do not wish to prejudge the critical issue of whether further resource development is to

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take place at all. Rather we are concerned with the conditions under which future resource development will take place, should that decision be made.

The employment problems of the residents of communities north of 50° and particularly of the Native men and women who live in these communities have been logged and described extensively and have, no doubt, received considerable attention at these hearings. The labour force participation rate (i.e. participation in the wage-paid labour force) of Natives in northern communities is approximately 20% lower than in the labour force at large. Factors which influence this participation rate are, of course, the number of Indians pursuing traditional life styles such as hunting and fishing, the lack of jobs or employment opportunities in or near Indian communities which discourages job search, and high dependence upon social assistance. The participation rate among Indian women is particularly low.

In addition to low participation rates, extremely high unemployment rates are prevalent in Native communities. In the absence of reliable surveys it is believed that the unemployment rate for Native Indians is approximately 2.2 times higher than for the rest of the population; in today's labour market this translates into a national unemployment rate of at least 25% for Natives. In communities north of 50° the rate is undoubtedly higher than this. It is estimated that on many isolated reserves the unemployment rate is as high as 60-80%; the situation is similar in some of the more accessible reserves and in the metis communities along the railroad line. Of those working, over 35% work half a year or less. In addition to this salaries are considerably lower than for the majority population.

In the communities north of 50° the vast majority of those jobs which are available to Native people are on short-term job creation projects (shorter than one year) or in local government where salaries are paid directly from transfer payments. While many of these jobs have skill development components, employers and sponsors are limited in the length and breadth of training which can be provided. There are few private sector employers

operating in these communities to provide industrial training. In larger Native communities such as Big Trout Lake or in towns like Geraldton or Red Lake Native employment is, for the most part, similarly limited to government and job creation projects despite the existence of other employers.

Native women, both status and non-status, are particularly disadvantaged in the northern communities in question. Victimized by poor education, no training, little work experience, discrimination and a tradition in which they are seen as the "support" for wage-earners and families rather than wage-earners themselves, many now find themselves the heads of households and families which they can only support with income from welfare or family benefits. These women often do not have the money and resources to move to communities where there are more employment opportunities and they know that if they remain in their own communities, even if employment opportunities arose they would not be in line because of lack of training and an attitude which awards employment to male family heads before women.

In recent years band businesses and local economic development have been explored as a response to unemployment in Northern Ontario. While the results of this impetus have been encouraging in one sense, the number of jobs which can be created in these businesses in the near future is small indeed when compared with unemployment figures.

There are indications that this situation may worsen. The level of commitment to government job creation programs remains uncertain from year to year; this is particularly problematic in a period of government spending restraint. Similarly, band run businesses are dependent upon uncertain incentive funds for start-up and upon a recessionary economy for survival. Traditional non-wage based employment such as trapping, hunting and fishing could be threatened by modernization and resource development projects.



A look at demographic patterns suggests the possibility of even greater problems in the future. The Native baby boom post-dated the general population boom by about a decade; it will cause the working age Native population of Northern Ontario to rise by about 20% over the 1980's. These young people will face the declining traditional economy around Native communities and may, without careful planning between the Native communities, the private sector and government, lack appropriate skills and training. The result will be increased unemployment and a greater dependency upon social assistance.

A critical question to be answered is this: If further resource development for Northern Ontario is planned and projects go forward, will the unemployment problems of Natives in Northern Ontario be solved? The indicators suggest that the answer to this question is "no". In western and northern Canada to date Native people located near resource development projects have benefitted very little from the new jobs which these enterprises created. A few employers have had notable success in establishing special programs to train local workers but most have brought in workers from other areas and have hired Native people only for low-skill, short-term jobs. At the same time the influx of economic activity has brought few spin-off benefits and has often weakened the Native community by eroding traditional sources of sustenance and income.

The experience of Natives living near major resource companies in Northern Ontario is similar. With relatively few exceptions Natives have received few jobs in the lumber and mining industry. Where special efforts have been made by the resource companies progress, in terms of numbers hired, has been slow. Indeed some companies which adopted Native Employment Programs have since abandoned them. This is not to say however that Affirmative Action Programs for Natives cannot be successful. Those achievements of some companies in western Canada, combined with advancements in the management science of human resource planning can provide us with a model for Affirmative Action in resource based industries.

Since the early 1970's some major resource developers in western Canada have become increasingly aware of the needs and aspirations of Native communities to seek employment and business opportunities in the industrial sector. At the same time, the Native organizations have looked not only to the resource developers themselves, but also to Federal and Provincial governments to represent their political and economic interests to the corporate sector to ensure, through the government authority to regulate and control resource development, that industry does take appropriate initiatives with regard to Native employment and business development. We will examine three companies which have, with greater or lesser involvement from the government and Native community, undertaken to establish Native Employment or Affirmative Action Programs. These three companies are: Amok, Syncrude and Eldorado Nuclear.

The Surface Lease agreement entered into in 1978 between Amok Ltd., and the Government of Saskatchewan is one of the most thorough and comprehensive approaches yet undertaken by a government in Canada to mandate the corporate sector to undertake Affirmative Action practices for Native people. This agreement spells out in detail the intent, goals, timetables, mechanisms, and preferences Amok must make available to Northern residents, the vast majority of which are Native, in its employment, contracting and purchasing practices.

It must be noted that this program was not imposed on the company, as company officials stated that they had already voluntarily undertaken or had intended to undertake many of the initiatives proposed in the agreement. In the view of the company, the agreement only "confirmed, clarified and specified" the company's original intent. To date Native participation in Amok's workforce has averaged 60-65%, well above the 50% level required by the terms of the agreement.

The most unique and significant aspect of the Amok program is the public monitoring mechanism which acts to ensure on an annual basis that Amok, through its employment and business opportunity plans, is meeting the goals and timetable established in the agreement. The agreement also specifies the Minister's Power to enforce the agreement which ultimately include termination of the lease.

Such an agreement voluntarily entered into by the corporate sector to meet public interests and government concerns, and jointly monitored by the government, the impacted communities, and senior corporate management appears to bring together the necessary partners in a manner to ensure a successful program.

Syncrude Canada Ltd., is among the largest employers of Native people in the private sector. Approximately 10% of its workforce is Native. After nine years' experience in both the construction and operation phases, the Native Development program at Syncrude has an extremely comprehensive and systematic approach to Native employment - perhaps the most comprehensive in Canada

The program represents a continuing commitment by Syncrude management to recruit, employ, and train Native people. Although the Native Development program is entirely a voluntary undertaking, Syncrude did publicly commit significant resources to Native employment and business development in an Agreement proposed by the Indian Association of Alberta and the DIAND in a statement commonly known as the "Syncrude Agreement." This formal agreement confirms Syncrude's intent and indicates special measures that will be undertaken in recruiting, training, counselling, Indian business development and related matters. It also established a tripartite monitoring mechanism consisting of Indian, government and corporate representatives. However, the government cannot enforce the agreement as in the case of Amok.

The senior management of Syncrude and the Native development program has established a five year plan for Native employment with a goal of 375 positions or 18% of the workforce to be Native people by 1984. Consequently, a full range of training and on and off the job support services are provided to Native employees by the twelve staff of the program. The ratio of program staff to Native employee is 1-17. Emphasis is on staff retention and reducing turnover to create a stable workforce. A Native business development function is also part of the program.

While Affirmative Action programs are not permitted under the Alberta Individual Rights Protection Act, the publicly stated employment and retention goals, timetables, and operation of the Syncrude Native Development Program has the result in practice of systematically increasing the number of Native people employed. Consequently, the Syncrude program may be subject to legal challenge. However, to date, it has the strong support of the Provincial government and is cited as an example in the province of what can be accomplished with regard to Native employment within the existing legislative framework through voluntary corporate initiative.

At the same time, it must be noted that the program exists only with the good will of senior management. At present, the program has few financial benefits to the company and may eventually succumb to budgetary restraints or other corporate priorities. The Native community and government sector have no way of securing its existence and ensuring its continued progress towards achieving Native employment and business development goals.

Eldorado Nuclear has employed Native people since 1954. In 1976 Eldorado was "pressured" by the Northern Employment Committee to adopt a "more formal systematic approach to Native employment" that resulted in the hiring of a Native Employment Coordinator.



Since then the program has gone through a number of changes but basically remains a "one person operation" which is responsible for recruitment, retention, and support services. Eldorado has no overall goals or timetables for employment of Native people and has a very high turnover rate of Native staff. The ratio of program staff to Native employees is 1-54. Eldorado's percentage of Native hires is very high - 22%. It is a unionized company which has, according to company representatives, significantly limited the design, operation, and impact of its Native program. There is no public monitoring or enforcement mechanism of the program.

As Eldorado has many surface leases in Saskatchewan, it is aware of the precedent of the Amok agreement and the company is taking voluntary initiatives to improve its Native employment program.

The programs of these three companies represent variations of a model which is known as Affirmative Action. Affirmative Action is a relatively new approach in Canada but it represents a long evolutionary development in the understanding of under-employment and employment discrimination and what constitutes a successful remedy to problems such as those we discussed at the beginning of this submission.

In its broadest sense, Affirmative Action is a comprehensive planning process designed to ensure not only equality of opportunity but also equality of results. Its primary objective is to ensure that any company's workforce is an accurate reflection of the composition of the local population given the availability of required skills. This objective, therefore, is essentially an ethical goal based on the value of ensuring equity. But there are also secondary objectives which may be defined as facilitating the smooth and rational operation of the labour market (in this case the labour force of Northern Ontario) and ensuring the maximum efficiency of individual company labour forces. Perhaps most important, by ensuring the improved access of local residents to employment or better jobs, there is a substantial impact

on reducing social cost. For example, the cost to maintain on assistance one Native family over the lifetime of its members runs into the millions of dollars. And this does not include the extra social costs associated with low incomes. In addition, the opportunity costs associated with the low utilization of Native people also represents an enormous economics cost in terms of lost production and unused human capital. .

Affirmative Action is based upon what is now referred to as the "systemic" approach to employment systems. Systemic Discrimination refers to employment practices or systems which may appear to be neutral in their treatment of minorities and may be implemented impartially, but which operate to exclude minorities for reasons which are not job-related or required for safe or efficient business operation.

The basis of systemic discrimination is the fact that traditionally most firms have regarded the white man as the desired worker for most positions aside from those traditionally regarded as women's or immigrants' work. Employment practices have consequently evolved based on the physical and cultural attributes of this favoured type of worker, placing other workers and job applicants at a disadvantage regardless of their abilities and qualifications. Over time, these practices have been so generally accepted and deeply embedded in the customary processes of the organization that they are seldom questioned or altered.

As the term "systemic" suggests, these practices exist throughout the systems whereby new workers are recruited and selected; existing employees are evaluated, deployed, trained and promoted; and conditions of employment are determined. In some cases, they exist in conjunction with intentional discrimination or unequal treatment. In many cases, however, the discriminatory impact on groups such as Native people, either is not recognized or is assumed to reflect actual inadequacies of these people in relation to the needs of the job. The employer may have no conscious intention of practicing discrimination.

In the case of Native people a number of employment practices have been identified as having an "adverse" impact. Recruitment patterns have developed which do not include the advertising of jobs in Native communities, even where they are adjacent to the work site. Union hall hiring has a negative impact on those living in remote communities. Education requirements for hiring and apprenticeships as well as experience credentials may exclude potentially qualified Native workers.

Canadian law no longer defines discrimination simply in terms of intent and inequity. The Canadian Human Rights Act, the Ontario Human Rights Code, and the decisions of courts and boards of inquiry recognize the validity of systemic discrimination and the advantages of this approach to the problem of identifying and combatting the practices which limit the employment opportunities of women and minorities.

The systemic approach to discrimination provides an objective method for determining whether discrimination is occurring and removes the question of guilt or blame from the search for solutions. It requires the establishment of solutions that impact positively on the employment and career development of target groups, rather than focusing merely on changing attitudes or assuring equal treatment.

Affirmative Action programs will vary according to the objectives of the principal actors (the employer, community, government, etc.), a company's size, the resources available for Affirmative Action and the present status of the organization regarding the employment of Natives. Experience in Canada and the U.S. has shown, however, that Affirmative Action programs must include four basic stages - planning, analysis, design and implementation.

The planning stage requires from the outset a clear statement of the commitment and goals of all interested parties. In the case of Syncrude Canada the Indian Association of Alberta, Syncrude and the Federal Government made a written commitment to develop a stable workforce for Syncrude's extraction plant in Fort McMurray, Alberta, which would include local Native labour. The Government of Canada has entered into agreements of this kind with other companies involved in resource development in Canada. For example, agreements containing Native participation targets were concluded with the Nanasivik Lead Zinc Mine and Dome Petroleum in the Arctic. Explicit compulsory Affirmative Action was mandated in the regulations for the Alaska Gas Pipeline to be built by Foothills Pipeline. Although approval to commence construction of the pre-built section was incumbent on the submission of an acceptable plan, work was allowed to proceed before a plan was approved. Most recently under the Canada Oil and Gas Act Affirmative Action Plans have been required from companies applying for licences to explore or develop oil or natural gas on Canadian lands. Natives will be the principal beneficiaries of these plans.

Experience would indicate that involvement of the Native community in this planning and commitment phase is critical. Only with this involvement can the employing organization be confident that the goals which it establishes vis-a-vis Native employment are consistent with the priorities of the local Native community and provide employment which is viewed as meaningful to the Native participants. Such involvement also ensures that employment issues are addressed, as they must be, in the context of a series of problems faced by Native communities today - particularly Native communities which are experiencing rapid development.

The analysis stage of any Affirmative Action Program involves a workforce analysis, a determination of those Natives available for employment in certain occupations, and a utilization analysis, which is a comparison of the workforce analysis and the availability study. It is important to determine whether Natives or other designated groups are under-utilized as a group and whether they are under-utilized or concentrated in particular units, salary levels or occupations. Either under-utilization or concentration will signal the need for further study.



A second type of analysis concerns the employment systems. Employment systems include job evaluation, recruitment, selection, training and development, upward mobility, transfers, terminations and layoffs, wages and benefits and conditions of employment. The purpose of analyzing employment systems is to discover whether and how certain systems exclude or limit Native or female participation in the company. Systems that are found to impact adversely on these workers are analyzed further to determine the degree to which they relate to actual job needs and to safe and efficient business operations.

The three companies in question have completed statistical analyses of both their workforces and of the local labour market. Goals for non-skilled, semi-skilled and skilled labour were set on the basis of this analysis. In Northern Ontario completion of such analyses will be facilitated in the months ahead by the publication of 1981 census data by occupational code using both sex and Native status as a variable.

All three companies completed an analysis of their employment systems. In particular Syncrude completed an analysis of its recruitment, selection criteria, personnel policies and advancement system and implemented a number of improvements in its program since 1978. The company hired consultants to review the turnover rate for Native staff and implemented actions designed to increase retention of Native employees. Management are also initiating a Native employee rotational program. There is an on-going internal assessment and analysis of the Native Development Program.

The design stage involves the development of procedures to be followed in the implementation of an Affirmative Action Program.

The first essential element is the development of non-discriminatory employment systems. This involves the elimination of employment practices which have been identified in the analytical process as adversely impacting on women and minorities and which are not justified on the basis of business necessity, or practices inconsistent with Human Rights Legislation. Alternative practices which are neutral in their impact on people such as Natives or women are designed to take their place.

The second essential element, special measures, are designed to remedy the effects or consequence of past discrimination and speed the process of improving the representation of target group workers in the full range of jobs and job levels. There are two types of special measures°:

Remedial measures refers to employment practices or systems designed to provide a preferential benefit to target group members for a specific period of time. They do not constitute permanent changes to employment practices. Examples of these include the establishment of an in-house Native recruitment program with two staff at Syncrude.

Since 1973, Syncrude has established an in-house Native recruitment program that has two full-time staff. During the construction phase, Syncrude initially offered unqualified Native applicants letters of "intent to hire" pending completion of further training. This practice is no longer continued. The recruiting staff visit communities providing basic information about company policy, take applications and pre-screen applicants, and check references. Syncrude also works through Native Outreach and Band employment counsellors as well as other Native organizations to identify prospective employees.

Amok's special selection and recruitment program for Natives has a provision for two Native personnel staff who maintain separate files on Native applicants and conduct pre-screening and reference checks. They also sit in on initial interview boards and make recommendations regarding hiring. Selection procedures are cognizant of the cultural background of Native people and selection criteria are flexible and related to job performance.

Other than apprenticeship exams, there are no skill tests that may inhibit Native applicants because of generally lower educational achievement.

Other special measures include counselling services such as those provided at Syncrude. According to its agreement the company must undertake counselling services on and off site, life skills and cultural counselling. Through exit interviews undertaken by three on-site counselling staff reasons for leaving are documented. Forty-three percent (43%) of turnover

related to on-site factors including shift work, not liking work, communication problems and alcohol-related factors. Forty percent (40%) of turnovers are due to off-site factors including family adjustment, cost of living and transportation services in Fort McMurray. Through a systematic interview of former employees and based on a review of their records and experiences to date, Syncrude has adjusted its recruitment pattern, selection criteria, counselling and support service to maximize retention of Native employees. On-site staff regularly monitor progression and relations of Native employees to supervisors and other staff in a systematic approach. Repeatedly identified barriers or circumstances are acted upon. Two off-the-job counsellors are available to assist in re-location, family adjustment and community services.

Support measures refer to employment practices or systems which are designed to alleviate specific employment problems of Natives but are accessible to all employees. An example of this is the transportation support system which Eldorado Nuclear provides to the workers - chiefly Native - who live outside of commuting range of the worksite. Workers are picked up from three participating communities by airplane on a weekly basis and returned at the end of the week. They are housed in camp facilities.

Another example of a support program is the Native Business Development Program of Syncrude under which Syncrude contracts are let to Native Businesses. Yet another example includes the community facilities and Native cultural and social events which Amok has funded at its Cluff Lake site.

The final essential element of the design state is to develop goals and timetables. Goals are not to be confused with quotas. They are more flexible than quotas and involve qualitative as well as numerical achievements. Goals permit management to track changes in the workforce in relation to stated objectives.

All three companies which we have been citing in this submission have developed goals and timetables. Syncrude, for example, established goals for Native hires and retention rates as part of a five-year plan for the Department of Native Development. Factors considered in the establishing of the goals included current turnover rates, availability of qualified Native people in the labour force, capacity of the organization to absorb and support trainees and progress in reducing turnover. Discussions were also held with Department managers and superintendents to establish department targets for training and employment. The main objectives and goals relate to increasing qualifications, stability and retention of Native staff. Future hire rate would range, of course, with retention rate.

In the case of Amok the lease agreement states during the construction phase Amok "shall, where possible, provide a preference to Northern residents in all construction activity".

Amok must further submit an annual Employment Plan indicating positions to be occupied by Northern residents and the recruitment, placement, promotion and training measures to fulfill the employment plan.

As established by agreement 50% of operational staff at the mine and mill site must be Northern residents from 1982 forward. These goals do not apply to administrative and professional positions which were to constitute an average of 11-15% of the total staff from 1981-83.

In both organizations Senior Vice-Presidents are responsible for the programs and a full-time staff is assigned to meeting goals and monitoring progress.

Having completed the planning, analysis and design stages, the final stage is implementation. The implementation phase simply operationalizes the Affirmative Action Plan and sets into motion the measures designed to achieve equitable representation of Natives in the workforce, to monitor the plan, make adjustments as needed, and integrate Affirmative Action Plans into overall company planning.



The programs reviewed here do not represent an ideal. However, the basic model which they have each employed provides other Canadian employers with a framework for the development of an employment program which can, through problem-solving and negotiation, meet the needs of both the employers and the communities in which they are operating. Those companies currently extracting resources from the Northern Environment and those who may be given permission to in the future can look to these examples for guidance on how to build a more effective and representative workforce. The Royal Commission may wish to consider mechanisms for guaranteeing the cooperation of government, industry and the Native Community in such an endeavour.

Before concluding we should note that it is not only Natives who suffer from the stereotype of operating outside the primary workforce of Northern Ontario. Women have traditionally experienced high unemployment or severe employment ghettoization in resource or single-industry communities. The basic model which is described in this submission has been used by many employers to increase the employment opportunities for women. Any employer undertaking an Affirmative Action Program should, of course, define those groups in their workforce who are under-represented and develop a plan to correct the situation for them all.

Affirmative Action does not stand on its own as a response to the problems of unemployment and economic stagnation in many Northern communities. However, it must be viewed as one innovation which will have a number of rewards over time. These rewards will include greater and more equitable utilization of all members of the labour force, more efficient and equitable employment processes, improved human resource planning and a greater sense of economic self-reliance in Native communities.



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T O   R E S O U R C E   D E V E L O P M E N T

A SUBMISSION TO:

The Royal Commission on the  
Northern Environment

FEBRUARY 21, 1983.

February 21, 1983

City of Thunder Bay

THUNDER BAY  
ECONOMIC DEVELOPMENT CORPORATION

Suite 203, Royal Bank Building  
620 Victoria Avenue East  
Thunder Bay, Ontario, P7C 1A9

Commissioner Edward Fahlgren  
Royal Commission on the Northern Environment  
Suite 201, Arthur Square  
215 Red River Road  
Thunder Bay, Ontario, P7B 1A5

Dear Mr. Fahlgren:

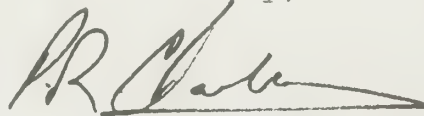
As General Manager of the Thunder Bay Economic Development Corporation, I am pleased to present the following brief on behalf of the City Council of the Corporation of The City of Thunder Bay. We appreciate this opportunity to meet the Commission and present our views regarding the future development and its environmental implications on the area near or north of the 50° parallel of latitude in Northern Ontario.

This submission has been prepared on relatively short notice and, given this timing, I have not had the opportunity to obtain a formal review of its contents by either the City Council of Thunder Bay or the Board of Directors of the Economic Development Corporation.

This brief is in response to your invitation to Mayor Walter Assef, dated January 31, 1983, asking him or his delegate to speak on solutions or recommendations that the City has with respect to current and future challenges we face in the northern environment. On February 7, 1983, the City Council passed two resolutions related to these hearings. One of these resolutions directed me to attend these hearings, on behalf of the City of Thunder Bay.

I welcome this opportunity to present some of the concerns, shared by the City Council, the Economic Development Corporation, and the citizens of Thunder Bay, which may be pertinent to these proceedings. Thank you.

Yours sincerely,



P. R. Charbonneau  
General Manager

Attachment.



## A BALANCED APPROACH TO RESOURCE DEVELOPMENT

### 1. INTRODUCTION

On January 31, 1983, Mr. Gerry LeSauvage, Senior Information Officer, Royal Commission on the Northern Environment, wrote to Mayor Walter Assef, inviting the Corporation of the City of Thunder Bay to speak on solutions or recommendations that the City has, to current and future challenges we face in this northern environment.

On February 7, 1983, the City Council of Thunder Bay passed the following Resolution: (at the Engineering and Operations Committee meeting)

"Moved by Alderman J. Climenhage, seconded by Alderman D. Willoughby, THAT with respect to the Tri-Party Fishing Agreement presently proposed by the Federal Government,

- a) The Federal and Provincial Governments be requested to delay forward movement on the proposal until such time as the City of Thunder Bay has had an opportunity to assess the impact of the said Agreement's provisions upon its Fishing and Tourist Industries; (and)
- b) The Economic Development Manager be directed to assess the impact referred to above and represent the City at all hearings conducted with respect to the said proposed agreement."

The Agreement noted above is the "Agreement With Respect To Fishery Resources" signed on December 17, 1982 by the Honourable Allan Pope, Ontario Minister of Natural Resources,

and the Honourable Lorne Henderson, Provincial Secretary for Resources Development, on behalf of the Government of the Province of Ontario, and five representative Status Indian organizations in Ontario, namely: the Union of Ontario Indians representing the "Anishnabek", the Grand Council Treaty #9 representing the "Nishnawbe-Aski", the Grand Council Treaty #3, the Association of Iroquois and Allied Indians, and the Six Nations of the Grand River Band. On January 20, 1983, Mr. Pope, in a statement to the Ontario Legislature, informed the House regarding the signing of the "Native Fishing Agreement", as he referred to it.

The above-noted Agreement is informally titled a "Tri-Party Fishing Agreement" as it appears to have been negotiated in the context of the ongoing "TRIPARTITE NEGOTIATIONS" which were formally initiated by a Memorandum of Understanding between the Government of Canada, the Government of the Province of Ontario, and the Status Indian organizations, which was signed by Ontario on February 10, 1982. The Honourable John Munro, federal Minister of Indian Affairs and Northern Development, representing the third party to the proposed Agreement, indicated on February 6-7, 1983, in Thunder Bay, that the federal government "will probably sign the Agreement in principle" soon, and that the "federal government fully supports the Agreement".

## 2. SUMMARY

While we are aware that these hearings have not been scheduled specifically to cover the subject of the proposed "Native Fishing Agreement", we have taken this opportunity to present the concerns of the City of Thunder Bay with respect

to:

- (a) the provisions of the proposed Agreement, particularly those provisions which call for the establishment of specific "zones" (Article 6) in which the Status Indian Bands will have involvement in the management of fisheries;
- (b) the apparent lack of public consultation during the negotiation of the proposed Agreement, specifically the limitation of prior consultation by the Ontario Minister of Natural Resources to only two non-Indian groups: the Northern Ontario Tourist Outfitters' Association and the Ontario Federation of Anglers and Hunters; and
- (c) the apparent lack of any detailed study of the potential economic impact of the proposed Agreement on both the tourism and commercial fishing sectors of the Northern Ontario economy.

### 3. SPECIFIC CONCERNS

#### (a) Proposed Restrictions on Resource Development:

While it is not the intention of this submission to question the validity of public concern with respect to the economic development needs of Ontario's Status Indian people, we feel that it is fair to question the apparent dedication for exclusive use by any particular group of citizens of portions of the natural resource base held, in trust, by the Crown for the use and benefit of all citizens of this province. We are aware of the historical context wherein certain portions of the land area of this Province have been reserved for the use and benefit of

Ontario's aboriginal or native people and their descendents. We are further aware that the delineation of these areas, under various Indian Treaties, has been a matter of ongoing discussions between native representatives and the Federal and Provincial Governments for many years. The related questions of provincial jurisdiction over the natural resource base on, or adjacent to, Indian reserves and the determination of reserve boundaries in the context of natural lakes and watercourses are beyond the scope of this submission.

It is our view, however, that any provisions of the proposed Agreement which would restrict opportunities for resource development to one specific group of citizens in geographic areas not covered by historical treaty or convention, would be both unfair and short-sighted, unless the potential future impact of such restrictions on the economic health of the entire population of the Province has been adequately measured, the prospective costs of the various alternative approaches have been assessed and the matter has been the subject of a thorough and effective consultation process.

While we are speaking now about a series of issues that could have impact throughout the Province, it is clear that this particular concern relates to Northern Ontario and, in particular, to the natural environment near or north of the 50° parallel of latitude. We are suggesting that a balanced approach to resource development holds the greatest long-term benefits for all citizens of Ontario. This viewpoint would imply that proper resource development planning take the longer-term perspective and allow for input by all concerned groups in society. We share the economic development concerns of Ontario's native people, who we recognize are an economically disadvantaged group.



The Corporation Of The City Of Thunder Bay

We believe that the implementation of the proposed "Native Fishing Agreement" should not proceed until both a detailed economic analysis of its long-term economic impact and an effective public consultation process have taken place. We are particularly concerned about the potential impact on this region's tourism and commercial fishing sectors, which are key economic generators in Northern Ontario. It is appropriate to note, at this point, that the region of Northern Ontario has been recognized as economically disadvantaged as a whole, and suffers, in particular, from a lack of new and sustained growth and sectoral diversification.

We would further point out that this Agreement, while recognizing the specific economic development needs of the Status Indian population, makes no provision for either the similar problems faced by the region's large Non-Status Indian and Metis population or the potential economic costs of the proposed restrictions to the region's important tourism industry.

(b) Lack of Prior Consultation:

In addition to our concerns about this apparently short-sighted imposition of serious restrictions on the development of the natural resource base of our region, we are equally concerned about the apparent lack of prior consultation on the provisions of the proposed Agreement. If the various communities of Northern Ontario, as well as the affected industry groups, had been adequately consulted prior to the recent announcements, than we are confident that many of our legitimate concerns could have been properly considered. It would appear that these hearings may be our only opportunity to voice our concerns, since it is our understanding that the purpose of this Royal Commission is to allow us this type of opportunity.

(c) Potential Economic Impact:

Our final area of concern is the potential negative impact that the proposed Agreement could have on the tourism and commercial fishing sectors of this region. While this impact is, unfortunately, only a matter of speculation at this time, it is clear that a thorough study of the economic implications of the proposed Agreement is needed. Without such a study, the Governments of Canada and the Province of Ontario might very well achieve their immediate goal of providing new economic opportunities for one particular disadvantaged group at a greater long-term cost to the population of this entire region. This Agreement can be viewed as a significant policy development by both levels of government; it is inconceivable that such policy commitments would take place without detailed public study and scrutiny.

4. CONCLUSIONS

We are hopeful that this submission can be viewed in a positive way. We are equally hopeful that the serious long-term economic development needs of Ontario's Status Indian people can be properly addressed by both levels of government. We feel, however, that the proposed Agreement may be a short-term and expedient solution which could entail much greater longer-term costs for the economy of the entire region. As the principal centre for the Northwestern Ontario economy, The Corporation of The City of Thunder Bay is concerned about the impact of the proposed Agreement and the apparent lack of meaningful consultation during its development.

Thank you for this opportunity to voice our concerns.

Rec'd Feb. 22/83

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MULTIPLE USE RESERVOIR PLANNING APPROACHES: LAC SEUL,  
NORTHWESTERN ONTARIO<sup>1</sup>

Anthony J. Usher and Michael F.P. Michalski<sup>2</sup>

**ABSTRACT:** Preparation of alternative resource management strategies for Lac Seul required a novel planning approach to deal with interdependence and competition among resource uses and users. Competition between regulation for power generation on the one hand, and fisheries, recreation, amenities, and wild rice on the other, was of particular concern. Four alternative strategies were developed which would allow government and public to consider the question, resource development with what broad policy objective and for whose benefit? Problems limiting the effectiveness and acceptability of the planning approach are reviewed, and planning and management directions applicable to multiple use reservoirs as well as to other multiple use land and water areas are suggested.

**RESUME:** La mise au point de stratégies alternatives de gestion des ressources naturelles pour le lac Seul requiert une approche innovatrice dans l'aménagement de l'interdépendance et de la concurrence entre les ressources existantes et les utilisateurs. La concurrence entre la réglementation pour la production d'énergie d'une part, et l'industrie de la pêche et des loisirs, l'aménagement de sites naturels et historiques et la production de riz sauvage, d'autre part, ont été l'objet d'une préoccupation particulière. Quatre stratégies possibles ont été développées qui permettront au gouvernement et à la communauté de se pencher sur la question des objectifs d'une politique élargie de l'aménagement des ressources et de ses avantages. Les problèmes limitant l'efficacité et l'acceptabilité d'une approche d'aménagement sont révisés, et des directives concernant la gestion et l'aménagement des réservoirs à usages multiples aussi bien que d'autres étendues terrestres ou aquatiques abritant une variété de ressources naturelles sont suggérées.

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<sup>1</sup>International Symposium on Reservoir Ecology and Management. Université Laval, Québec, June, 1981.

<sup>2</sup>Respectively, Assistant Director, Resource Planning, Hough, Stansbury + Michalski Limited, Toronto, Ontario and Director of Environmental Studies, Hough, Stansbury + Michalski Limited, Toronto, Ontario.



## THE LAKE

Lac Seul, located midway between Lake Nipigon and Lake Winnipeg, is the second largest lake wholly within the Province of Ontario, with an area of 1,437 km<sup>2</sup> (see Figure 1). Lac Seul is also the closest approximation in Ontario to a large area reservoir. While many other large Ontario lakes have been raised by up to 3 m by impoundment, initial increases and subsequent fluctuations in area and volume have been modest due to terrain conditions. The effects of impoundment on Lac Seul have been much more dramatic. Yet this lake, bypassed by the main currents of population, transportation, and industrial activity in Northwestern Ontario, has received little attention from the province's resource planners and managers.

The outflow of Lac Seul is regulated by a dam at Ear Falls (see Figure 1). Ontario Hydro generates power at Ear Falls, but the most important function of the dam is to contribute to the stabilization of flows for downstream power generation on the English and Winnipeg rivers. Between Ear Falls and Lake Winnipeg, Ontario Hydro and Manitoba Hydro operate between them a total of seven hydroelectric power stations.

Use of Lac Seul as a reservoir under the present storage regime began in 1936, and water levels have subsequently averaged 3.0 to 3.5 m over levels previous to the commencement of dam construction in 1928. The location of the lake on a clay plain with very modest relief caused the rising waters to back up into tributary water bodies, inundate extensive land areas, and create a completely new shoreline. The volume of Lac Seul increased from a natural 2.05 billion m<sup>3</sup>, to an impounded 5.68 billion m<sup>3</sup> at recent average levels. Annual fluctuations have averaged 2.26 m between 1957 and 1978, and the physical impacts of these have been significant.

## USE AND USERS

About 7,000 people live on or near Lac Seul. Almost all of these residents are concentrated in four communities, shown on Figure 1: Sioux Lookout and environs (population about 4,000), Ear Falls (2,000), Hudson (500), and the Lac Seul Indian Reserve (500). Few of the residents of the non-Indian communities depend directly on Lac Seul for their living; for most, the lake is, if used at all, a day use recreational resource. The historic relationship of the Indian people to Lac Seul was a much more direct one. The lake remains the basis

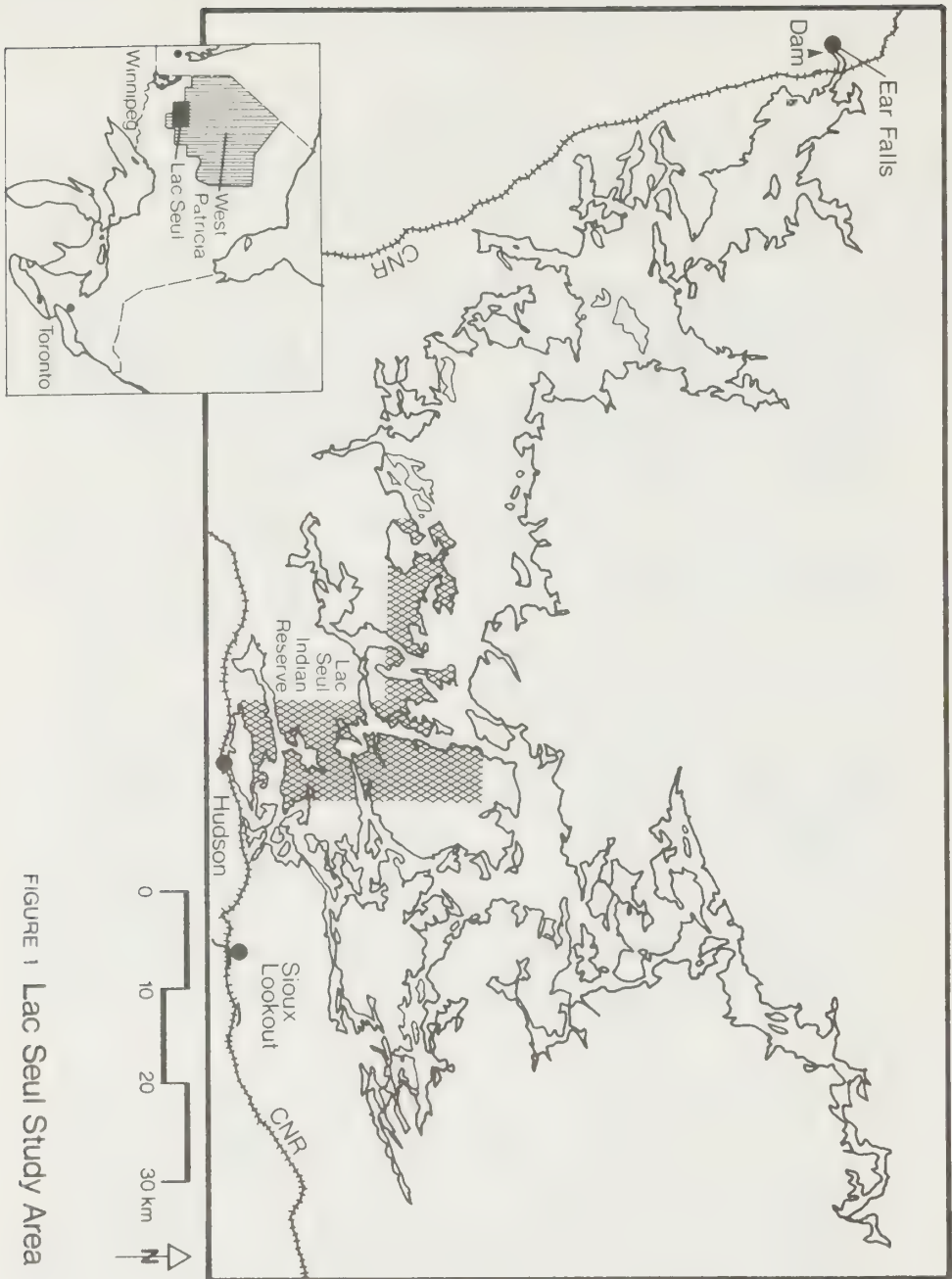


FIGURE 1 Lac Seul Study Area

for transportation and communication for the scattered population of the Lac Seul reserve. However, events in the early 1970s which led to the exclusion of reserve residents from the lake's commercial fishery, and other changes in the traditional economy, have reduced the economic dependence of Indian people on the lake.

Power production, both at Ear Falls and downstream, is the principal use of Lac Seul's water. Several other uses are made of the lake, however. There is an active commercial fishery carried out by area residents. The lake is also very productive of two prime Northwestern Ontario game fish, yellow pickerel (Stizostedion vitreum vitreum) and northern pike (Esox lucius). An active sports fishery is carried out for these species, primarily by United States visitors staying at tourist lodges and commercial houseboats on the lake. Local residents also fish the lake on a day use basis from a number of public access points. A very small amount of non-consumptive outdoor recreation (pleasure boating, canoeing, etc.) also takes place; these activities are inhibited by adverse climate and frequent heavy wave conditions. Only a very few cottages have been developed on the lake.

The regulation of Lac Seul for power purposes significantly affects these other uses. When the lake was flooded in the 1930s, the areas to be inundated were never properly cleared. Thus, flooding and water level fluctuations have created a variety of navigational hazards affecting boating for fishing and other recreational purposes. As well, the scenic quality of the lake is impaired by extensive dead standing timber and shoreline debris present to this day. Fluctuations possibly have some negative effects on fish production (Hanna and Michalski, 1932). Fluctuations also affect the property interests of shoreline tourist camp operators and seasonal and permanent residents, and have discouraged the development of shoreline cottaging. As well, flooding and fluctuations have affected archaeological and historical sites of concern to local residents; several Indian graveyards have been severely damaged. Finally, fluctuations have prevented production and harvesting of wild rice (Zizania aquatica), a domestically and commercially important traditional resource in Northwestern Ontario.

Regulation of Lac Seul is carried out by the Lake of the Woods Control Board. This agency was established by concurrent federal, Ontario, and Manitoba legislation, consists of

members appointed by the three governments, and is empowered, among other responsibilities, to regulate Lac Seul. The Control Board is an anomalous agency within Canadian resource management law and practice, as it operates independently of and is not directly accountable to any of the three governments which established it. The Control Board has been loath to alter its regulation practices, maintaining that its mandate is to optimize power production, and that the power benefits forgone by altering regulation practices would far outweigh the benefits that might be gained by other resource users.

The principal uses of the lands surrounding Lac Seul are commercial timber harvesting, hunting, and trapping. There is no active mining in the area at present, other than aggregate extraction for local use. Both sawtimber and pulpwood are harvested for processing at various mills in the surrounding area, and harvesting and processing both employ large numbers of local and regional residents. Moose (Alces alces) hunting, and to a lesser extent hunting of other species, are carried out by both local residents and visitors. Trapping is carried out by local residents.

It is widely believed that timber harvesting practices, and in particular clearcutting which is characteristic in the boreal forest, significantly affect the wildlife upon which hunting and trapping depend. However, there is no clear evidence which would permit any generally acceptable conclusions to be drawn. As well, the provision of forest road access undoubtedly increases hunting pressure to the detriment of the moose herd. Again, however, the resource managers, in this case the Ontario Government, maintain that in the absence of sufficient evidence to the contrary, the benefits forgone from altering timber harvesting practices outweigh the benefits which might be gained by other resource users.

The preceding comments are intended to suggest the nature of competition and interdependence among user communities for the water-based and land-based resources of Lac Seul and its environs. In addition, there are a variety of other resource conservation and management issues and problems which are present in the area as throughout Northwestern Ontario.

#### RESOURCE PLANNING AND MANAGEMENT

Although the Lake of the Woods Control Board is responsible for regulation of Lac Seul, it has no powers in the area other than to determine the outflows to be permitted from the



lake. Similarly, Ontario Hydro, the agency producing power at the outflow, has no powers other than to operate its generating facilities. No special agency has ever been established with planning or management authority over the reservoir as a whole.

Responsibilities for lands, inland waters, and natural resources in Ontario lie wholly with the Ontario Government, whether through division or delegation of powers under the Canadian constitution. The principal resource management agency is the Ontario Ministry of Natural Resources, with jurisdiction over Crown lands (which account for almost all lands and waters in the Lac Seul area outside urban centres and Indian reserves); timber, wild rice, and outdoor recreation on Crown lands; and all fish and wildlife outside Indian reserves.

The Ministry of Natural Resources and its predecessor Department of Lands and Forests have been active for many years in regulating and managing resource use in the Lac Seul area. However, until recent years, no comprehensive land or resource planning has been undertaken in the area. Some policies have been in place regarding Crown land use and disposition in the Lac Seul area, but the official status and practical application of these policies have been uncertain and inconsistent.

In the early 1970s, the Ministry of Natural Resources embarked on a comprehensive land use planning program in Northern Ontario, where Crown lands are dominant, to be complemented by a comprehensive natural resource management strategy for Southern Ontario, where private lands are dominant. It was intended that land use plans or strategies could ultimately be prepared for each Ministry administrative district. Controversy over resource allocation in the northern portion of Northwestern Ontario subsequently led to the initiation of a special land use planning effort in what came to be known as the West Patricia area, which includes Lac Seul (see Figure 1).

The Ministry decided that the importance of Lac Seul and its environs merited special study as part of the West Patricia planning effort, and in 1979 retained the authors' consulting firm for this purpose. The study area encompassed a total of 10,000 km<sup>2</sup> (see Figure 1), and included portions of three of the Ministry's administrative districts.

The consultants were charged with compiling up-to-date background information on the study area's resources, and with developing alternative resource management strategies and tactics for the area. No recommendations were to be made, however.

The intent of the Ministry was that public involvement in the consultants' work would be limited to that necessary for background information collection. Once the consultants' report was submitted, the Ministry would determine how the alternatives would be presented to the public within the framework of the West Patricia planning program, and would itself carry out public participation and selection of strategies and tactics. It was never intended that the process culminate in a special land use plan for Lac Seul. Rather, the Ministry would incorporate the results of the Lac Seul planning effort in the land use plans for the three Ministry administrative districts among which the lake and its environs are apportioned. The consultants' final report (Hough, Stansbury + Michalski Limited, 1981) was submitted to the Ministry in the fall of 1981.

#### PLANNING APPROACHES

The traditional approach of the Ministry of Natural Resources to developing plans for managing the resources of public land areas in Ontario has involved the formulation of alternative conceptual land use plans for review and assessment by decision makers, resource managers, and the general public. The differences among alternative conceptual plans have generally been denoted primarily by differences in the location, types, and extent of development to be permitted, as expressed in maps for each alternative. These maps would show the nature and intensity of uses permitted in various zones of the planning area in question. Traditionally, these alternatives have been characterized in terms appropriate to this approach. For example, a "no development" approach might be compared against a "recreation oriented development" and a "resource production oriented development" approach, with land and water zoning and resource management tactics elaborated for each.

More recently, this approach has been modified in accordance with the Ministry of Natural Resources' comprehensive land use planning program (Ontario Ministry of Natural Resources, 1980). Policy objectives and production targets are set for individual resource sectors by planning regions (northwestern, northeastern, and southern Ontario). Objectives are then delegated to, and targets partitioned among, administrative districts on a hierarchical basis. Alternative conceptual plans for administrative districts are then developed within these parameters. Thus, district plans become for the most part exercises in how to most efficiently meet, from a given land and water base and within resource capacity limitations,

predetermined production volumes established on a provincial or subprovincial basis for individual resource sectors.

The consultants undertook a critical evaluation of whether either of the above approaches should be used in developing alternative resource management strategies for the Lac Seul study area. Among the characteristics of the study area described earlier in this paper, the following were felt to be particularly relevant to determining the best approach to planning.

1. Lac Seul is a very large lake, and the overall study area was even larger. The study area was approximately the same size as Ontario's Golden Horseshoe (Durham, York, Metropolitan Toronto, Peel, Halton, Hamilton-Wentworth, and Niagara regions), the home to over four million people.
2. At the same time, the study area was an anomaly within the Ministry of Natural Resources planning framework. Resource production targets had been determined, and land use plans were being prepared, for each Ministry administrative district. The study area fell within three districts, but did not constitute a major portion of any. In commissioning the consultants' study, the Ministry made clear that the study area, and Lac Seul proper in particular, merited consideration as a special policy area.
3. The existing major communities, Sioux Lookout, Hudson, Ear Falls, and the Lac Seul Indian Reserve, and their economic and social dependence on the study area's resources, would be "givens" in any plan.
4. Consequently, while the extent of undeveloped land and water in the study area afforded a great deal of flexibility in terms of planning future uses, existing settlement and resource uses meant that alternatives weighted towards single uses or single complexes of uses for the entire study area would be unrealistic.
5. The land and water bases of the study area were subject to a full range of resource uses which were interdependent and competitive. One use could be maximized only at the expense of others, and each user community, whether located within or outside the study area, had its own set of uses of the area. Thus, tradeoffs between uses inevitably involved gains for one user community and losses for another.

6. Consequently, the determination of policies and production targets for individual resource sectors, and the mapping of locations, types, and extent of development to be permitted, would have to be preceded by some basic policy decisions involving Government policy makers and resource managers, as well as industries and communities relying on area resources. The first question which would have to be answered was, resource use and development with what broad policy objective and for whose benefit?

The consultants therefore decided to formulate four alternative strategies which would reflect distinctive and meaningful policy choices for land and resource management in the Lac Seul study area. These alternatives would provide the Government and the public with the opportunity to consider the question, resource use and development for what and for whom? before getting down to the specifics of resource sector policies and targets, land use plans, and resource management tactics. In order to explain and illustrate the alternative strategies and make clear their impacts in terms of land use and resource management, each alternative was supplemented by a reasonable and practical management tactic or set of tactics for implementation of the alternative within each resource sector (forest resources, mining, water resources, commercial fishing, angling, moose hunting, trapping, wild rice, outdoor recreation, amenity values).

The four alternative strategies were as follows.

Alternative 1: The Status Quo. Under this alternative, current Ministry of Natural Resources and private sector resource activities would continue unchanged.

Alternative 2: Management to Maximize Resource Production. Under this approach, each component of the resource base of primary interest to the Ministry of Natural Resources would be managed to achieve its maximum volume of product consistent with market demand conditions. As the production of hydroelectric power is not of primary interest to the Ministry, that activity would be a secondary consideration in this alternative. Management tactics under this alternative were designed to maximize gross economic return from each remaining resource component.



Alternative 3: Management to Maximize Social Benefits.

Under this alternative, each component of the resource base would be managed to maximize social and amenity benefits to Ontario residents in general and study area residents in particular, the quality and quantity of resource products directly available to study area residents, and the share of economic benefits from resource production accruing to study area residents. Management tactics under this alternative were designed to increase local employment in and local economic and social benefits from each resource sector, to maximize the long term economic and social stability of each sector, and to disperse these benefits as widely as possible among local residents.

Alternative 4: Management to Maximize Net Economic

Benefits. Under this alternative, the resource base as a whole would be managed to maximize its net economic return without regard to other considerations. Accordingly, the forest industry, the mining industry should significant resources be identified as profitably exploitable, and the regulation of Lac Seul water levels for power generation, would be emphasized. Management tactics under this alternative were designed to promote economic efficiency for society as a whole. Current high costs of capital, and the marginal location and resource capability of the study area within Ontario, dictated that management tactics emphasize short term returns, discourage long term investments in resource conservation and management, and maintain a competitive economic environment in which the free market could function with minimum state intervention.

The four alternative strategies were intended to serve as models. Each was significantly different from all others in overall objectives, although there were some similarities between strategies in management tactics. There are infinite gradations along the spectrum from which a management strategy might actually be selected by the Ministry of Natural Resources. The four alternatives described are simply points on the spectrum, and need not constrain the ultimate policy choices. However, each alternative represented a distinctive concept which could be readily evaluated.

## THE BEST LAID PLANS...

Will the planning effort undertaken by the consultants result in the implementation of resource management strategies which will improve the provision of economic, social, and environmental benefits from Lac Seul to the people of Ontario? During the course of the Lac Seul study, several problem areas became evident which would inevitably impair the effectiveness of the planning effort. These problem areas included economic analysis, government organization and accountability, public involvement, the planning context for the study, and the expectations of resource managers. Each of these will now be examined in turn.

The consultants were not specifically mandated to carry out any economic analysis of the benefits and costs of the various resource uses. Yet it is not possible to develop an optimal management strategy for Lac Seul, or any other land or water area supporting interdependent and competitive resource uses, without economic analysis of those uses and the existing and potential tradeoffs among them. Unfortunately, the Ministry of Natural Resources and most other planning agencies in Ontario have generally carried out land use planning in the almost complete absence of valid economic data and analysis. A recent Ontario Economic Council research study has examined this problem and criticized the various planning agencies for their failures (Frankena and Scheffman, 1980).

In order to attempt to remedy this deficiency for the Lac Seul study, the consultants developed a model for analyzing the economic contributions of each resource sector to the study area using data already available. This model was based on standard benefit-cost analysis as set out by Sewell *et al.* (1965). However, this effort at economic analysis was not very successful. In general, the data on direct benefits from resource use and on government revenues and expenditures were vague, and the resulting estimates were therefore crude. Data on costs of resources applied to production were generally unavailable for the study area, and proxy values from secondary sources had to be used. Indirect benefits and costs could not be estimated for any activity. No meaningful data were available to estimate the direct benefits of power generated as a result of Lac Seul regulation, or even the quantity of power so generated (other than at Ear Falls). No information was available to develop estimates of marginal benefits and costs of production of various resources, estimates essential to

developing an optimal strategy for integrated resource production.

Two aspects of government organization impede effective and integrated planning for Lac Seul. First, the lake and its shoreline are partitioned among three Ministry of Natural Resources administrative districts. District offices have considerable independent resource management authority, and the result is fractured and inconsistent management of a single water body. Second, the Lake of the Woods Control Board, which regulates the waters on which the other resources of the reservoir depend, operates independently of the Ministry of Natural Resources.

There are also serious problems of public accountability surrounding the Lake of the Woods Control Board. The anomalous position of the Control Board within Canadian resource management law and practice has already been described. Essentially, the Control Board is not accountable to the public. The Ministry of Natural Resources is accountable to the public in the normal political sense. However, there are few checks, in terms of direct public accountability, to the sweeping executive authority which the Ministry yields as the owner and manager of public lands and resources in Ontario. The Ministry has been subject to considerable criticism in Northern Ontario in recent years for its lack of direct accountability to the public.

The problem of accountability is also a problem of public involvement. The Ministry of Natural Resources is committed in principle to public involvement in land and resource planning, but the application and effectiveness of that commitment have often been inconsistent and controversial. In the course of the consultants' Lac Seul study, it became evident that the local user communities with the greatest dependence on the lake's resources did not feel for the most part that their needs and concerns were being reflected in resource planning and management decisions. The most disaffected user communities were tourist camp operators and the Lac Seul Indian Band. The disaffection of the Band was further compounded by the controversies and conflicts surrounding Indian rights to lands and resources in Northwestern Ontario generally. Both groups also felt ill served by the Lake of the Woods Control Board, which has not had until recently any commitment to public involvement in its operations except on an ad hoc or reactive basis.

As described earlier, a program of planning by Ministry of Natural Resources administrative district, within which the Lac Seul study would fit, theoretically was in place at the outset of the study. However, as of November 1981, the Ministry had still not yet decided how to carry out the public participation and plan development steps leading from the consultants' report to district land use plans. The district land use plans themselves appeared to be a couple of years away from completion. Uncertainties about the district planning context for the Lac Seul study, and how and when the consultants' work would be put to practical use within that context, were weakening the ultimate validity and usefulness of the work for both government and public.

Even if all the preceding obstacles were absent, the implementation of effective and efficient resource planning and management would still require the participation, cooperation, and support of line resource planners and managers. The field staff of the Ministry of Natural Resources are conditioned to the planning and management approaches conventionally practiced in the Ministry. They are also in the unenviable position of being charged with long term resource planning and management while under the continuing fire of administrative and management crises, and of short term pressures from members of the public, interest groups, resource industries, and elected representatives. As a result, most field staff are understandably much more oriented to day to day reactive management than to long term policy making.

The field staff of the Ministry of Natural Resources are well aware that the best laid long term plans become outdated the moment they are committed to paper, if not before. They are also well aware that the question, resource use and development for what and for whom? is answered primarily in the short term, often behind closed doors, and generally on the basis of who has the best combination of lungpower, leverage, and entrenched influence. It is not easy for a resource management agency enmeshed in responding to immediate crises and pressures to be oriented to answering the question, resource use and development for what and for whom? in the long term, in open forums, and with all relevant information readily available, accessible, and understandable.

The expectations of Ministry of Natural Resources field planners and managers led many of them to have difficulty with the planning approach advocated by the consultants for the Lac



Seul study area. Some staff expected the planning effort to concentrate on maps which would show them what would and would not happen "on the ground" and help them deflect the pressures of crisis management. Some staff could not accept that questions of resource use and development with what broad policy objective and for whose benefit should be faced first, or that these questions could be understood by the public even if properly and fairly presented. Some staff simply resisted resource management strategies and tactics which involved novel though realistic and implementable approaches. Since we live in a real, not an ideal, world, all these concerns were probably quite justified.

Nevertheless, our experience with Lac Seul leads us to suggest some planning and management directions which might well be applicable to multiple use reservoirs in general as well as to multiple use land and water areas in Northwestern Ontario.

1. Planners and managers must become more committed to economic analysis, including marginal analysis, of the benefits and costs of various resource uses, if they wish to more closely approach optimal management of reservoirs and other land and water areas. This will require a major effort to develop sound methodologies for economic analysis and to collect and use the required data.
2. No one government agency can be responsible for all aspects of resource planning and management. The creation of special agencies for the sole purpose of planning and managing a particular reservoir or land area brings about new problems of government organization and accountability. However, planning is likely to be more effective when one existing agency takes the lead and other agencies are obliged to refer and account to the lead agency. The same is true of management.
3. There will always be controversy and conflict among resource user communities over competing objectives and uses. However, if resource management agencies commit themselves to laying all the cards on the table for public scrutiny, these controversies and conflicts are likely to be dealt with most straightforwardly and effectively. Government has a responsibility to inform the public as clearly and succinctly as possible of the positive and negative environmental, social, and economic impacts of resource management actions and alternatives.

4. There will always be a tension in our political and administrative system between the short view and the long view, between the closed door and the open door, between the reactive and the proactive. There will always be a reluctance to confront the question, resource use and development for what and for whom? However, a greater commitment by government to open discussion of broad policy issues, and a better informed public, might act together to reduce the current imbalance between the two sets of tendencies.
5. When area planning is undertaken within a regional planning context, the proponent agency should determine in advance how area planning will contribute to and be incorporated into planning for the surrounding region. This effort at the outset of area planning will pay off in more timely and useful results.
6. Planning efforts for multiple use reservoirs and comparable multiple use land and water areas will be seriously flawed unless the proponent agencies endorse and follow the five preceding directions. If these conditions cannot be met, then it is difficult to justify the time and expense involved in comprehensive planning efforts.

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February 11, 1983

Mr. J.E.J. Fahlgren  
Commissioner  
Royal Commission on  
the Northern Environment  
55 Bloor St. West, Ste. 801  
Toronto, Ontario  
M4W 1A7


Dear Mr. Fahlgren:

Please accept our enclosed article, "Multiple Use Reservoir Planning Approaches: Lac Seul, Northwestern Ontario," published in the Canadian Water Resources Journal in 1982, as a submission from us to your Commission.

We believe that this article is relevant to your Commission's mandate for the following reasons.

1. The subject area, Lac Seul, is "north of 50<sup>0</sup>" and lies within the West Patricia planning area.
2. Resource allocation in the Lac Seul area, and the impacts of impoundment of Lac Seul itself, have been subject of representations before your Commission.
3. The paper's analysis and conclusions deal with the land and resource planning and allocation process not only in the Lac Seul area in particular, but also in Northern Ontario generally, a topic to which you have given a special priority.
4. The analysis describes an attempt to plan on the basis of meaningful policy choices. This attempt was an alternative to the land and resource planning and allocation approaches traditionally practised. Your Commission is faced with policy choices, and with the development of alternative planning and allocation approaches. The process outlined in our paper might be of some small assistance in the formulation of your recommendations.

Yours truly,

  
Anthony Usher

AU:mc



Michael Michalski

Rec'd Feb. 22/83













